

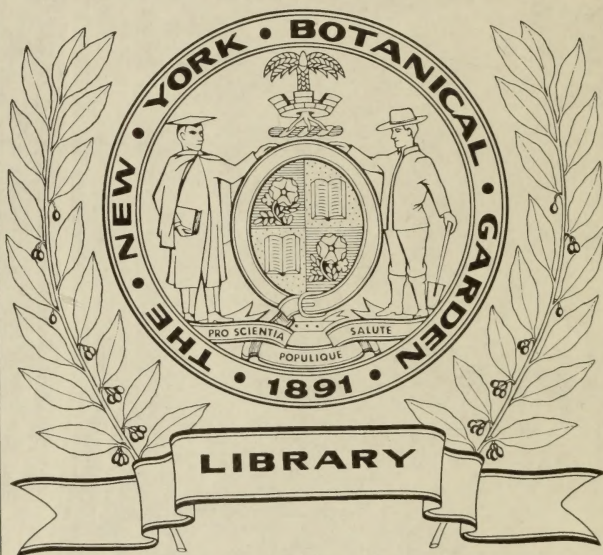
A LIST
OF
PLANTS GROWING WITHOUT CULTIVATION

IN
Franklin, Hampshire and Hampden Counties
MASSACHUSETTS

By GEORGE E. STONE,
Professor of Botany at the Massachusetts Agricultural College

AMHERST, MASS.
PRESS OF CARPENTER & MOREHOUSE
1913

QK125
.S815



Norman Taylor Collection

A LIST
OF
PLANTS GROWING WITHOUT CULTIVATION

IN
Franklin, Hampshire and Hampden Counties
MASSACHUSETTS

By GEORGE E. STONE,

Professor of Botany at the Massachusetts Agricultural College

AMHERST, MASS.
PRESS OF CARPENTER & MOREHOUSE
1913

Additions and Corrections.

The following plants are introduced instead of native, as indicated in the text:

Amaranthus HYBRIDUS L. and forma HYPOCHONDRIACUS L., p. 26.

Melilotus OFFICINALIS (L.) Lam., p. 38.

Insert p. 29, after **R. abortivus** L.:

Ranculatus abortivus L. var. **eucyclus** Fernald. Springfield,
L. Andrews.

Insert p. 31, after **Alyssum**:

Thlaspi ARVENSE L. Springfield, L. Andrews.

Insert p. 32, after **S. officinale** (L.) Scop. var. **leiocarpum** DC.:

Sisymbrium ALTISSIMUM L. Springfield, L. Andrews.

The first effort toward a systematic study of the native plants of this region was made by Pres. Edward Hitchcock¹ about 1817. The results of his explorations were published in 1829, and for many years very little was added to this list except what Prof. Tuckerman and others published in contemporary scientific journals. In 1875 Prof. Edward Tuckerman,² who for many years occupied the chair of history and botany in Amherst College, published his "Flora-Amherstiensis," in co-operation with Mr. Charles C. Frost, of Brattleboro, Vermont. This list is based on Pres. Hitchcock's previous catalogue, but is much more extensive, including as it does an elaborate list of mosses, liverworts, lichens and fungi, and in all it contains nearly 3,000 species and varieties. It is unusually complete for its day, and represents the work of skilled observers and systematists.

Besides being largely responsible for the flowering plants and vascular cryptogams contained in the Flora, Prof. Tuckerman contributed a very elaborate list of lichens, a most perplexing group of plants. He will always be remembered as the American pioneer in the study of lichens, and was from the first a thorough master of this difficult group, while he lived having no competitors. Even today his work remains unsurpassed and ranks as a classic.

The comprehensive list of mosses, liverworts, fungi, etc., was contributed by Mr. Charles C. Frost, and quite a few of the fungi bear his name as authority. This self-educated man, whose trade was that of cobbler, spent his leisure moments in the study of these difficult groups.

In 1887 Dr. N. A. Cobb,³ then a teacher of science at Williston Seminary, but later government pathologist in New South Wales and now with the Bureau of Plant Industry, Washington, D. C., published a revised edition of Prof. Tuckerman's catalogue, in which new plants were added and the boundaries of others not so well known extended. Since Dr. Cobb's catalogue in 1887 a few additions to the plants of the region have been published, appearing largely in *Rhodora*.

Professional collectors and students from the various educational institutions located in the Connecticut valley have for years been active in collecting herbaria, and some new and rare plants have been

¹ E. Hitchcock—Catalogue of Plants growing without Cultivation in the Vicinity of Amherst College.

² E. Tuckerman—Catalogue of Plants growing without Cultivation within Thirty Miles of Amherst College.

³ N. A. Cobb.—A List of Plants Found Growing Wild within Thirty Miles of Amherst.

brought to light. But since 1875 the study of botany has undergone many changes, and its present day problems differ greatly from those of former times. The systematist's conception of a species has also changed, a finer discrimination in determining species being required at the present time. The nomenclature question, the constant splitting up of species and the revision of families and genera are rendering the subject more perplexing and less fascinating to at least the true nature loving botanist.

In the present instance it has been our intention to bring the flora up to date and modify its scope to include the three counties comprising the Connecticut valley. These counties, whose boundaries are fairly uniform, represent a section extending from Connecticut to the New Hampshire and Vermont lines. The Connecticut valley forms a distinct area differing quite widely in its soil and climatic conditions from other sections of the state, the elevation ranging from less than 100 feet to only a few hundred feet. Here the elm reaches its greatest perfection, and on the higher slopes the rock maple finds its most congenial environment. The eastern part of the territory resembles that of Worcester county, and the general elevation ranges from 400 to about 1,200 feet; while the western section, which has an elevation of 800 to 2,200 or more feet, and which is farther from the coast, resembles in many ways southern Vermont. On the higher elevations of our western range the golden hawkweed becomes a pest in fields, as in Vermont, although in the Connecticut valley this plant is not common enough to be a nuisance. Here, too, the soil conditions are more primitive, therefore humus plants are found more abundantly than elsewhere in the state. In this region grow forests of beech and red spruce, and the balsam fir and hackmatack are common.

The diversified forms of plants which characterize a region and which we term its flora, represent adaptations to a more or less congenial environment, and even during the relatively brief period of the settlement of New England many of our introduced plants undoubtedly became modified to a certain extent. Even species which are adapted to a much warmer climate than our own frequently prove themselves as hardy as our native species, whereas on the other hand, quite a few of our native trees, like the sycamore and others, are often affected by winter killing.

There are many factors which play an important part in the distribution of plants of which we know little, and the problems involved are difficult of solution. Variations in the humus content, in the soil moisture or light intensity, may completely exterminate a species in a given locality. Continued deforestation has greatly modified our flora, many species having become rarer. Humus has played a very important role not only in affecting the predominance of certain

species but in modifying their growth. Many such species as hemlock, canoe birch, beech, hobblebush, round-leaved cornel (*Cornus circinata* L'Her) and others find less congenial conditions than formerly. The hemlock has declined from a tree second in importance in the primitive forests to one of slight importance at the present time. Such plants as *Hydrophyllum virginianum* and *canadense*, certain orchids and many others were no doubt always more or less rare or local, but at present they are very rare. In colonial times the wild strawberry was quite abundant in Massachusetts, and even less than a century ago it was fairly plentiful, but at present it is of no economic value except in our western territory. Some of the plants observed by Dr. Hitchcock nearly a century ago and included in this list have not been found since his time, and others have become rare. On the other hand, deforestation and the consequent cultivation of much of our soil has modified the environment to such an extent that the willow, birch, goldenrod, aster, violet, bluet, *Lespedeza* and a host of others are found more abundantly than formerly, and as Prof. Ezra Brainerd has pointed out, there is a marked tendency for violets to hybridize when growing in the open.

Many of our introduced plants were brought from Europe in early times. Some of them have been growing without much change for many years, while others have so adapted themselves to our conditions that they have become troublesome weeds. In the past twenty-five years many such plants have been introduced through grass seed and by means of commercial relations with other countries. Many of the plants which Prof. Tuckerman observed as rare in 1875 are now common enough, such, for example, as *Stellaria graminea* L., *Digitalis humifusa* Pers., *Leontodon autumnalis* L. and *Cerastium vulgatum* L., etc. On the other hand, some of our introduced plants have not shown any tendency to spread, and in some cases they have apparently not held their own. Among such plants might be mentioned *Tussilago Farfara* L., *Sedum*, buckthorn (*Rhamnus cathartica* L.), various dooryard weeds and plants used for medicinal purposes in former times, such as lovage (*Levisticum officinale* Koch.), wormwood (*Artemisia absinthium* L.), catnip (*Nepeta Cataria* L.), horseradish (*Radicula Armoracia* L.), henbane (*Hyoscyamus niger* L.), horehound (*Marrubium vulgare* L.), and Canada thistle, which forty years ago was considered a more or less serious pest, but is not now troublesome. These plants were in former times considered essential by most well regulated families, but now, along with the lilac, Lombardy poplar, live-forever and the old garden rose, they may be found persisting under unfavorable conditions, serving merely as landmarks of once thriving homesteads.

Some of the more important introduced species not noted by Prof. Tuckerman, which are more or less common now, are *Trifolium hybridum* L., golden hawkweed, *Bromus tectorum* L., Russian thistle (*Salsola*), *Galinsoga*, *Berteroa incana* (L.) DC., *Thymus Serpyllum* L., *Cynodon Dactylon* (L.) Pers., *Lysimachia Nummularia* L., *Lychnis Flos-cuculi* L. and *Lychnis alba* Mill.

Impure seed is the most important factor in the introduction of harmless and noxious species, and from 75 to 100 or more different species may occur in a particular sample or lot of grass seed. The impurities run from 5 to 25 per cent or more, and although frequently harmless, 10 or 15 per cent of noxious weeds are sometimes present in grass or clover seed. Since seed are sent from all over the United States and imported from foreign countries, it follows that a great variety of plants may be introduced into a particular region. Black medick, Canada thistle, charlock, chicory, crabgrass, chickweed, dodder, various docks and plantains, green foxtail, goosefoot, lady's thumb, ragweed, sheep sorrel, wild carrot, witch grass, yellow foxtail and many others constitute the principal impurities in seed. Dame and Collins,¹ in their "Flora of Middlesex county," enumerate 460 naturalized and adventive species and varieties which have become more or less established in that region.

In the preparation of this list I am under obligations to different ones whose names will be found throughout the text. This is especially true of Mr. Ray E. Torrey, of the 1912 class of this College, who has rendered valuable assistance all through the work. Mr. Torrey has also been of great service, from his extensive collecting and critical knowledge of our flora, in furnishing data in regard to the present range of certain species.

I am also indebted to Prof. A. Vincent Osmun, my colleague, who has given much attention to our native ferns and violets, and to Miss Jessie V. Crocker for assistance in seeing the work through the press. Dr. W. H. Chapin, of Springfield, has kindly furnished notes in regard to the plants in that locality, and Mrs. Maria L. Owen's long experience in collecting and studying the native plants has been helpful. Mr. Luman Andrews, of Southington, Connecticut, who is at present making an exhaustive study of the plants about Springfield, has furnished a large amount of data concerning new finds, as well as extending our knowledge of the range of other species. Mr. Andrews' herbarium has been presented to the Springfield Science Museum, where it is well arranged, and it is anticipated that he will add greatly to it in the future. We have also had access to the herbarium of the Springfield Science Museum, which besides the already referred to Luman Andrews collection, contains that of the Springfield Botanical

¹ L. Dame and F. S. Collins, "Flora of Middlesex County, Massachusetts, 1888.

Society; and, in addition, we have consulted the herbaria of Mt. Holyoke and Amherst Colleges, and the Knowlton herbarium* of the Massachusetts Agricultural College. The mosses, liverworts, lichens, fungi and Characeae have been purposely omitted from this list. The list of lichens in Prof. Tuckerman's catalogue is one of the most complete and authentic published, but the list of fungi, Characeae, etc., contributed by Mr. Frost is of little value as it stands today, since much progress has been made in the study of these groups since his time.

This list would possess much less value were it not for the work of my predecessors, and frequent reference has been made to Pres. Edward Hitchcock¹, Prof. Edward Tuckerman², Prof. H. G. Jesup³, Col. W. S. Clark⁴, Dr. N. A. Cobb and others, who have contributed to the previous lists of this region.

I have endeavored to differentiate between indigenous (native), naturalized, and adventive species (introduced but not permanently established), by putting the naturalized species in capitals and the adventive in italics, although there may be some errors in judgment as to which are adventive and which naturalized in our range.

The nomenclature and arrangement of families, etc., follows Gray's Manual, seventh edition, although we have in some instances referred to Britton & Brown's North American Flora, and Prof. L. H. Bailey's Cyclopedia of American Horticulture.

This list contains in all 1190 native and 303 naturalized and adventive species, a total of 1493.

GEORGE EDWARD STONE.

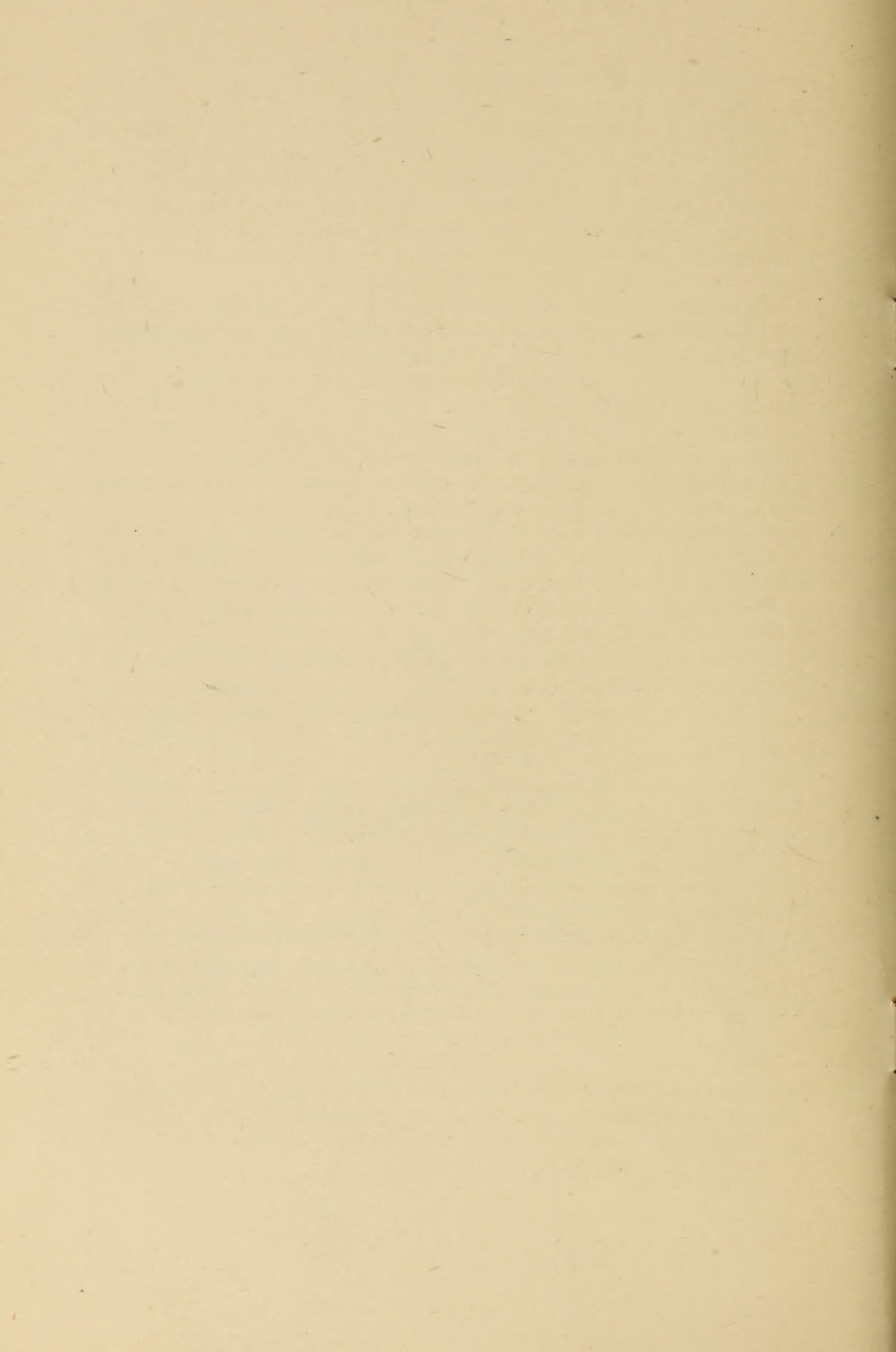
Amherst, Mass., Feb. 15, 1913.

¹ Edward Hitchcock, A. M., D. D., LL. D., 1793—1864. Professor Chemistry and Natural History Amherst College, 1825—1845. President, 1845—1854. State Geologist, 1830—1864. Emeritus Professor Geology Amherst College, until 1864. Pioneer in American geological research.

² Edward Tuckerman, B. A., M. A., LL. B., LL. D., 1817—1886. Lecturer and Professor Oriental History Amherst College, 1854—1873. Professor Botany, 1858—1886. Pioneer in American lichenology.

³ Henry Griswold Jesup, M. A., 1826—1903. Professor Botany Dartmouth College, 1877—1899.

⁴ William Smith Clark, M. A., Ph. D., LL. D., 1826—1886. Professor Chemistry, Botany and Zoology Amherst College, 1852—1867. Colonel Civil War, 1862. President and Professor Botany and Horticulture, Mass. Agr. College, 1867—1879.



PTERIDOPHYTA

(Ferns and Fern Allies)

POLYPODIACEAE

- Polypodium* [Tourn.] L. Polypody.
 vulgare L. Common Polypody.
Phegopteris [Presl.] Fée. Beech Fern.
 polypodioides Fée.
 hexagonoptera (Michx.) Fée.
 Dryopteris (L.) Fée. Oak Fern.
Adiantum [Tourn.] L. Maidenhair Fern.
 pedatum L.
Pteris L. Brake or Bracken.
 aquilina L. Common Brake.
Pellaea Link. Cliff Brake.
 atropurpurea (L.) Link. Mt. Toby; Gorge and near Titan's piazza, Mt. Holyoke, Mrs. C. S. Phelps; Wilbraham, Dr. W. H. Chapin; Mt. Tom; Mt. Sugar Loaf.
Cryptogramma R. Br. Rock Brake.
 Stelleri (Gmel.) Prantl. Mt. Toby.
Woodwardia Sm. Chain Fern.
 virginica (L.) Sm. Springfield, Dr. W. H. Chapin; Belchertown, South Hadley.
 areolata (L.) Moore. Hadley, H. G. Jesup; Deerfield, E. Hitchcock.
Asplenium L. Spleenwort.
 Trichomanes L.
 platyneuron L. Oakes.
 Ruta-muraria L. Wall Rue. Mt. Toby.
 angustifolium Michx. Mt. Toby, Mt. Tom and vicinity.
 acrostichoides Sw. Amherst, South Hadley, etc.
 Filix-femina (L.) Bernh. Lady Fern.
Camptosorus Link. Walking Leaf.
 rhizophyllus (L.) Link. Mt. Toby, etc., Mt. Holyoke[Gorge] Mrs. C. S. Phelps; Wilbraham, Dr. W. H. Chapin.
Polystichum Roth.
 acrostichoides (Michx.) Schott. Christmas Fern.
 acrostichoides (Michx.) Schott. var. *schweinitzii* (Beck.) Small.
 Not rare.
Aspidium Sw. Shield Fern. Wood Fern.

- A. *Thelypteris* (L.) Sw.**
simulatum Davenp. Mt. Toby, A. V. Osmun.
noveboracense (L.) Sw.
marginale (L.) Sw.
Goldianum Hook. Mt. Tom, S. Stebbins; Mt. Toby; Notch, Mt. Holyoke, A. V. Osmun.
Boottii Tuckerm. Mt. Toby.
cristatum (L.) Sw.
cristatum L. Sw. var. *clintonianum* D. C. Eaton. Mt. Toby, etc.
spinulosum (O. F. Müller) Sw. Mt. Toby, etc.
spinulosum (O. F. Müller) Sw. var. *intermedium* (Muhl.) D. C. Eaton. Mt. Toby, etc.
spinulosum (O. F. Müller) Sw. var. *dilatatum* (Hoffm.) Hook. Mt. Toby, A. V. Osmun.
- Cystopteris* Bernhardi.** Bladder Fern.
bulbifera (L.) Bernh. Mt. Toby, Sunderland, etc.
fragilis (L.) Bernh. Springfield, S. Stebbins; Mt. Holyoke; Sunderland, etc.

- Woodsia* R. Brown.**
ilvensis (L.) R. Brown.
obtusata (Spreng.) Torr.
***Dicksonia* L'Hér.**
punctilobula (Michx.) Gray. Hay-scented Fern.

- Onoclea* L.**
sensibilis L. Sensitive Fern.
***Struthiopteris* (L.) Hoffman.** Ostrich fern. This fern in Mass. attains its maximum development in the Conn. valley reaching a height of 7 feet or more.

SCHIZAEACEAE

- Lygodium* Swartz.** Climbing Fern.
palmatum (Bernh.) Sw. Local.

OSMUNDACEAE

- Osmunda* [Tourn.] L.** Flowering Fern.
regalis L.
Claytoniana L.
cinnamomea L. Cinnamon Fern.

OPHIOGLOSSACEAE

- Ophioglossum* [Tourn.] L.** Adder's Tongue.
vulgatum L.
***Botrychium* Swartz.** Moonwort.
simplex E. Hitchcock. Conway, E. Hitchcock; Plainfield, etc., Porter; Mt. Toby.

- B. lanceolatum** (Gmel.) Angstroem. var. **angustisegmentum** Pease & Moore. Amherst, L. B. Tuckerman; Conway, H. G. Jesup; Mt. Toby, Sumner C. Brooks; Hol-yoke Range, A. V. Osmun.
ramosum (Roth.) Ashers Conway, etc., H. G. Jesup; Mt. Toby, T. O. Fuller in *Rhodora*, Vol. III., p. 144; Spring-field, Dr. W. H. Chapin.
obliquum Muhl.
obliquum Muhl. var. **dissectum** Spreng.
ternatum (Thunb.) Swartz. var. **intermedium** D. C. Eaton.
virginianum (L.) Swartz. Rattlesnake Fern.

EQUISETACEAE

- Equisetum** [Tourn.] L. Horsetail.
arvense L. Common Horsetail.
arvense forma **decumbens**, Springfield.
sylvaticum L.
fluviatile L. Pipes.
hyemale L. Scouring Rush.
hyemale L. var. **affine** (Engelm.) A. A. Eaton. Springfield, L. Andrews.
variegatum Schleich. var. **Jesupi** A. A. Eaton. Conway, H. G. Jesup.
scirpoides Michx. Plainfield, Porter; Colrain, E. F. Williams in *Rhodora*, Vol. XII., p. 170.

LYCOPODIACEAE

- Lycopodium** L. Club moss.
Selago L. Mt Holyoke, Freeman in *Rhodora* Vol. V., p. 290.
lucidulum Michx.
inundatum L. Amherst, etc.
annotinum L.
clavatum L. Common Club Moss.
clavatum L. var. **monostachyon** Grev. & Hook.
obscurum L.
obscurum L. var. **dendroideum** (Michx.) D. C. Eaton.
sabinaefolium Willd. Tuckerman.
complanatum L.
complanatum L. var. **flabelliforme** Fernald. Ground Pine.
tristachyum Pursh.

SELAGINELLACEAE

- Selaginella** Beauv.
rupestris (L.) Spring.
apus (L.) Spring.

ISOETACEAE

Isoetes L. Quillwort.

echinospora Durieu. var. *Braunii* (Dur.) Engelm.

Eatoni Dodge.

Gravesii A. A. Eaton.

Engelmanni A. Br. Other forms of *Isoetes* exist in this region
but they have not been sufficiently studied.

SPERMATOPHYTA

(Seed Plants.)

GYMNOSPERMAE

TAXACEAE

Taxus [Tourn.] L. Yew.

canadensis Marsh. American Yew, Ground Hemlock.

PINACEAE

Pinus [Tourn.] L. Pine.

Strobus L. White Pine.

rigida Mill. Pitch Pine.

SYLVESTRIS L. Scotch Pine. Escaped from cultivation and established abundantly in some localities.

resinosa Ait. Red Pine. Locally distributed.

Larix [Tourn.] Adans. Larch. American Larch, Tamarack, Hackmatack.

laricina (DuRoi) Koch.

decidua Mill. Amherst, escaped from cultivation.

Picea Link. Spruce.

rubra (DuRoi) Dietr. Red Spruce. Occasionally found on high elevations. Much less abundant in our region than Worcester and Berkshire counties.

mariana (Mill.) BPS. Black or Bog Spruce. Found in cold bogs and swamps.

abies (L.) Karst. Norway Spruce. Occasionally escaped from cultivation.

Abies [Tourn.] Hill. Fir.

balsamea (L.) Miller. Balsam or Balm-of-Gilead Fir. Generally distributed but not common.

Tsuga (Endl.) Carrière. Hemlock.

canadensis (L.) Carr.

Chamaecyparis Spach. White Cedar, Cypress.

thyoides (L.) BSP. Springfield.

Juniperus [Tourn.] L. Juniper.

communis L. Common Juniper.

communis L. var. *depressa* Pursh. Three distinct types of *Juniperus communis* are found in this region; a low form var. *depressa*; a more or less erect form considered as the type; and a tree-like form corresponding to *J. communis* var. *erecta* Pursh. See Mrs. E. H. Terry, *Rhodora*, Vol. III., p. 146.

virginiana L. Red Cedar or Savin. Variable in form and color.

ANGIOSPERMAE

MONOCOTYLEDONEAE

TYPHACEAE

- Typha* [Tourn.] L. Cat-tail Flag.
latifolia L. Common Cat-tail.
angustifolia L. Belchertown near B. & M. R. R. station, S. C.
 Brooks.

SPARGANIACEAE

- Sparganium* [Tourn.] L. Bur-reed.
eurycarpum Engelm.
americanum Nutt. Bay street, Springfield, L. Andrews.
simplex Huds.

NAJADACEAE

- Potamogeton* [Tourn.] L. Pondweed.
natans L.
Oakesianus Robbins.
epiphydrus Raf.
alpinus Balbis.
americanus C. & S. Conn. river, etc.
pulcher Tuckerm. South pond, Belchertown, E. Tuckerman.
amplifolius Tuckerm.
heterophyllus Schreb.
heterophyllus forma *graminifolius* (Fries) Morong.
lucens L. Leverett pond. E. Tuckerman.
praelongus Wulf.
perfoliatus L.
zosterifolius Schumacher.
obtusifolius Mertens and Koch. Forge pond, Granby, E. Tuckerman.
pusillus L.
foliosus Raf.
hybridus Michx.
dimorphus Raf.
pectinatus L. Conn. river, E. Tuckerman.
Robinsii Oakes.
Najas L. Naiad.
flexilis (Willd.) Rostk. & Schmidt.

JUNCAGINACEAE

Scheuchzeria L.

palustris L. Belchertown ponds, Bradley pond, Springfield, S. Stebbins.

ALISMACEAE

Sagittaria L. Arrow-head.

latifolia Willd. Passing into many forms.

heterophylla Pursh.

graminea Michx.

Alisma L. Water Plantain.

Plantago-aquatica L.

HYDROCHARITACEAE

Elodea Michx. Water-weed.

canadensis Michx. Conn. river, etc.

Vallisneria [Mich] L. Tape Grass, Eel Grass.

spiralis L. Conn. river, etc.

GRAMINEAE

Andropogon [Roen] L. Beard Grass.

scoparius Michx.

virginicus L. Amherst.

furcatus Muhl.

Sorghastrum Nash.

nutan (L.) Nash. Indian Grass, Wood Grass.

Digitaria Scop. Finger Grass.

filiformis (L.) Koeler.

HUMIFUSA Pers. This and the preceding species constitute very troublesome lawn grasses.

SANGUINALIS (L.) Scop. Crab Grass.

Paspalum L.

setaceum Michx.

Panicum L. Panic Grass.

verrucosum Muhl. Springfield, island in Red House Pond.
Scribner & Merrill in *Rhodora*, Vol. III., p. 103.

capillare L. Old-witch Grass.

philadelphicum Bernh. Southwick, C. H. Bissell, *Rhodora*, V.
13, p. 54.

miliaceum L. European Millet. Waste places. Springfield,
Dr. W. H. Chapin.

dichotomiflorum Michx. Amherst, E. Tuckerman; Agawam,
Scribner & Merrill, *Rhodora*, Vol. III., p. 104.

virgatum L. Switch Grass.

agrostoides Spreng.

depauperatum Muhl.

- P.** *linearifolium* Scribn. Springfield, L. Andrews.
dichotomum L.
huachucae Ashe. var. *silvicola* Hitchc. & Chase.
Scribnerianum Nash. Mt. Holyoke, Scribner & Merrill in
Rhodora, Vol. III., p. 112.
xanthophyllum Gray. Amherst, H. G. Jesup; Springfield, Dr.
W. H. Chapin. See Scribner & Merrill in *Rho-*
dora, Vol. III., p. 109.
clandestinum L.
latifolium L.
- Echinochloa** Beauv.
CRUSGALLI (L.) Beauv. Barnyard Grass.
frumentacea (Roxb.) Link.
- Setaria** Beauv. Bristly Foxtail Grass.
GLAUCA (L.) Beauv. Foxtail, Pigeon Grass.
VIRIDIS (L.) Beauv. Green Foxtail, Bottle Grass.
ITALICA (L.) Beauv. German Millet or Hungarian Grass.
- Cenchrus** L. Sandbur, Bur Grass. Amherst, Hadley, Springfield.
carolinianus Walt.
- Zizania** (Gronov.) L. Indian Rice, Water Oats.
palustris L. Northampton, Tuckerman & Jesup; Long-
meadow, C. S. Plumb; Springfield, Dr. W. H.
Chapin; Amherst.
- Leersia** Swartz. Cut-grass, White Grass.
virginica Willd. White Grass.
oryzoides (L.) Swartz. Rice Cut-grass.
- Phalaris** L. Canary Grass.
canariensis L. In waste places.
arundinacea L. Reed Canary Grass. Generally distributed.
arundinacea L. var. *PICTA* L. Ribbon Grass. Persistent
near old dwellings.
- Anthoxanthum** L. Sweet Vernal Grass.
ODORATUM L.
Puelii Lecoq & Lamotte. Mass. Agr. College.
- Hierochloe** (Gmel.) R. Br. Holy Grass.
odorata (L.) Wahlenb. Vanilla Grass. Agawam, Dr. W. H.
Chapin.
- Oryzopsis** Michx. Mountain Rice.
pungens (Torr.) Hitchc.
asperifolia Michx.
racemosa (Sm.) Ricker.
- Aristida** L. Triple-awned Grass.
dichotoma Michx. Poverty Grass.
purpurascens Poir. Mt. Holyoke, E. Hitchcock; W. Spring-
field, Dr. J. W. Robbins.

- Muhlenbergia** Schreber.
sobolifera (Muhl.) Trin.
tenuiflora (Willd.) BSP.
sylvatica Torr.
mexicana (L.) Trin.
racemosa (Michx.) BSP.
Schreberi J. F. Gmel. Drop-seed, Nimble Will. Amherst, H. G. Jesup; South Hadley.
capillaris (Lam.) Trin. Hair Grass. Sugarloaf: Mt. Holyoke.
- Brachyelytrum** Beauv.
erectum (Schreb.) Beauv.
- Phleum** L.
 PRATENSE L. Timothy, Herd's Grass.
- Alopecurus** L. Foxtail Grass.
 PRATENSIS L. Meadow Foxtail.
geniculatus L. Floating Foxtail.
geniculatus L. var. *aristulatus* Torr. Amherst, etc. E. Tuckerman; also by H. G. Jesup.
- Sporobolus** R. Br. Drop-seed. Rush Grass.
vaginiflorus (Torr.) Wood.
uniflorus (Muhl.) Scribn. & Merr.
- Agrostis** L. Bent Grass.
 ALBA L. White Bent Grass.
 ALBA L. var. *VULGARIS* (With.) Thurb. Red Top.
hyemalis (Walt.) BSP.
perennans (Walt.) Tuckerm. Thin Grass.
 CANINA L. Rhode Island Bent Grass. In lawns, etc.
- Calamagrostis** Adans. Reed Bent Grass.
canadensis (Michx.) Beauv. Blue-joint Grass.
inexpansa Gray. Lock's Pond, Shutesbury: H. L. Clark, in *Rhodora*, Vol. I, p. 165.
cinnoidea (Muhl.) Barton.
- Cinna** L. Wood Reed Grass.
arundinacea L.
- Holcus** L.
 LANATUS L. Velvet Grass.
- Sphenopholis** Scribn.
obtusata (Michx.) Scribn.
pallens (Spreng.) Scribn.
palustris (Michx.) Scribn. Amherst, Hitchc. Catal.
- Trisetum** Persoon. Nonotuck, E. Tuckerman.
spicatum (L.) Richter. Deerfield, H. G. Jesup.
flavescens (L.) R. & S. Introduced in grass-seed.

Deschampsia Beauv.

flexuosa (L.) Trin. Common Hair Grass.

caespitosa (L.) Beauv. Hadley meadows, E. Tuckerman ; Mt. Toby, H. G. Jesup.

Avena (Tourn.) L. Oat.

sativa L. Waste places.

Arrhenatherum Beauv. Oat Grass.

elatus (L.) Beauv. Tall Oat Grass.

Danthonia DC. Wild Oat Grass.

spicata (L.) Beauv.

compressa Aust. Shutesbury, etc. H. G. Jesup.

sericea Nutt. Easthampton, Dr. N. A. Cobb.

Spartina Schreb. Cord or Marsh Grass.

Michauxiana Hitchc. Slough Grass. Shores of Connecticut River, E. Tuckerman.

Cynodon Richard. Bermuda or Scutch Grass.

Dactylon (L.) Pers. Amherst and Springfield.

Eleusine Gaertn. Goose Grass. Yard Grass.

indica Gaertn. Amherst, rare, E. Hitchcock ; Springfield, Mrs. M. E. Owen. Observed year after year.

Phragmites Trin. Reed.

communis Trin. South Amherst, E. Hitchcock.

Tridens R. & S.

flavus (L.) Hitchc. Tall Red Top. Sugarloaf, E. Hitchcock.

Eragrostis Beauv.

hypnoides (Lam.) BSP.

capillaris (L.) Nees.

pilosa (L.) Beauv. Amherst, E. Tuckerman ; Springfield, Dr. W. H. Chapin and elsewhere.

MEGASTACHYA (Koeler) Link.

minor Host. Amherst, rare, E. Tuckerman, 1875 ; more common since.

pectinacea (Michx.) Steud.

Briza L. Quaking Grass.

media L. Amherst, rare, E. Tuckerman, 1875.

Dactylis L. Orchard Grass.

GLOMERATA L.

Poa L. Meadow Grass. Spear Grass.

ANNUA L. Low Spear Grass.

COMPRESSA L. Canada Blue Grass. Wire Grass.

triflora Gilib. Fowl Meadow Grass.

pratensis L. June Grass, Spear Grass. Kentucky Blue Grass.

TRIVIALIS L. Rough-stalked Meadow Grass.

- P. alsodes* Gray. North Amherst, H. L. Clark, in *Rhodora*,
Vol. I, p. 165.
nemoralis L. Hitchc. Catal ?
- Glyceria* R. Br. Manna Grass.
Torreyana (Spreng) Hitchc.
canadensis (Michx.) Trin. Rattlesnake Grass.
nervata (Willd.) Trin. Fowl Meadow Grass.
grandis Watson. Reed Meadow Grass.
pallida (Torr.) Trin.
fluitans (L.) R. Br.
acutiflora Torr. Amherst, E. Tuckerman ; Springfield.
- Festuca* L. Fescue Grass.
octoflora Walt.
OVINA L. Sheep's Fescue.
OVINA L. var. *duriuscula* (L.) Hoch.
OVINA L. var. *CAPILLATA* (Lam.) Hoch.
ELATIOR L. Taller or Meadow Fescue.
nutans Spreng. Mt. Tom.
- Bromus* L. Brome Grass.
secalinus L. Cheat or Chess Grass. Grain fields ; introduced in seed.
tectorum L. Waste places, local ; more common near the coast.
ciliatus L.
Kalmii Gray. Wild Chess Grass.
- Nardus* L. Mat Grass.
stricta L. Amherst, E. Tuckerman, 1871 : mowings, Mt. Hermon (Gill.) See Britton and Brown Flora, Vol. I, p. 224.
- Lolium* L. Darnel.
PERENNE L. Common Darnel, Perennial Ray or Rye Grass.
- Agropyron* Gaertn.
REPENS L. Beauv. Couch, Quitch, Quick or Witch Grass.
caninum (L.) Beauv. Awned Wheat Grass. Mt. Holyoke, Leverett, etc., E. Tuckerman.
- Elymus* L. Lyme Grass. Wild Rye.
virginicus L.
canadensis L.
striatus Willd.
- Hystrix* Moench. Bottle-brush Grass.
patula Moench.

CYPERACEAE

- Cyperus* [Tourn] L. Calingale.
diandrus Torr.
rivularis Kunth. Springfield, L. Andrews.

- C. aristatus** Rottb.
dentatus Torr.
esculentus L. Occasionally in cultivated fields.
erythrorhizus Muhl. Herb. Spfld Sci. Museum. Agawam river,
 Mrs. M. L. Owen
ferax Rich. Hadley meadows, H. G. Jesup.
strigosus L.
filiculmis Vahl.
- Dulichium** Pers.
arundinaceum (L.) Britton.
- Eleocharis** R. Br. Spike Rush.
Robbinsii Oakes. Ponds.
olivacea Torr. Leverett pond, H. G. Jesup.
diandra C. Wright.
ovata (Roth.) R. & S.
obtusa (Willd.) Schultes.
palustris (L.) R. & S.
acicularis (L.) R. & S.
tenuis (Willd.) Schultes.
intermedia (Muhl.) Schultes.
- Psilocarya** Torr. Bald Rush.
scirpoides Torr. Pond shores, Springfield, Fernald; in *Rhodora*, Vol. X., p. 142.
- Stenophyllus** Raf.
capillaris (L.) Britton.
- Fimbristylis** Vahl.
Frankii Steud.
- Scirpus** [Tourn.] L. Bulrush or Club Rush.
planifolius Muhl.
hudsonianus (Michx.) Fernald.
subterminalis Torr. Aquatic.
debilis Pursh.
americanus Pers.
Torreyi Olney. Pond in Hadley meadows, etc., E. Tuckerman.
validus Vahl. Great Bulrush.
fluviatilis (Torr.) Gray. River Bulrush. South Hadley.
rubrotinctus Fernald. Amherst, H. L. Clark; in *Rhodora*, Vol. I, p. 165. Springfield, L. Andrews.
sylvaticus L. Herb. Spfld Sci. Museum. Springfield, L. Andrews.
atrovirens Muhl.
georgianus Harper. Springfield, L. Andrews.
polyphyllus Vahl.
lineatus Michx.
cyperinus (L.) Kunth. Wool Grass.

- S. cyperinus* var. *pelius* Fernald. Springfield, L. Andrews.
cyperinus (L.) Kunth. var. *condensatus* Fernald. Herb. Spfld
 Sci. Museum. Springfield, L. Andrews.
atrocinctus Fernald. Springfield, L. Andrews.
- Eriophorum* L. Cotton Grass.
callitrix Cham. Hare's Tail. Belchertown south pond, H. G.
 Jesup.
gracile Roth. Leverett, etc., E. Tuckerman; Amherst, H. G.
 Jesup.
tenellum Nutt. Springfield, L. Andrews.
angustifolium Roth.
viridi-carinatum (Engelm.) Fernald. Buckland, open wet grounds.
 F. F. Forbes; in *Rhodora*, Vol. VII, p. 91.
virginicum L.
- Fuirena* Rottb. Umbrella Grass.
squarrosa Michx. Indian Orchard, Mrs. M. L. Owen.
- Hemicarpha* Nees & Arn.
micrantha (Vahl.) Britton.
- Rynchospora* Vahl. Beak Rush.
macrostachya Torr. Belchertown and Leverett, E. Hitchcock,
 and later collectors: Franklin Co., Fernald; in
Rhodora, Vol. X., p. 142.
fusca (L.) Ait. f. Leverett pond, E. Tuckerman, H. G. Jesup.
alba (L.) Vahl.
glomerata (L.) Vahl.
- Cladium* P. Browne. Twig Rush.
mariscoides (Muhl.) Torr. Belchertown, Leverett, etc., E. Hitch-
 cock; Amherst, H. G. Jesup, and later collectors.
- Scleria* Berg. Nut Rush.
triglomerata Michx. Amherst, H. G. Jesup; Hadley, etc., E.
 Hitchcock.
- Carex* [Ruppius] L. Sedge.
scoparia Schkuhr.
scoparia var. *condensa* Fernald. Springfield, L. Andrews.
tribuloides Wahlenb.
siccata Dewey. Westfield, Rev. Dr. Davis.
mirabilis Dewey.
straminea Willd.
hormathodes Fernald.
festucea Schkuhr.
festucea Schkuhr. var. *brevior* (Dewey) Fernald. Herb. Spfld
 Sci. Museum.
adusta Boott. Hadley, etc., E. Tuckerman.
stellulata Good.

- C. *stellulata* var. *angustata* Carey. Springfield, L. Andrews.
scirpoides Schkuhr.
canescens L.
canescens L. var. *disjuncta* Fernald. Herb. Spfld. Sci. Museum.
brunnescens Poir.
bromoides Schkuhr.
Deweyana Schwein.
tenuiflora Wahlenb. Southampton.
trisperma Dewey.
tenella Schkuhr.
rosea Schkuhr.
retroflexa Muhl.
Muhlenbergii Schkuhr. Hadley, etc., E. Tuckerman.
Muhlenbergii Schkuhr. var. *enervis* Boott. Herb. Spfld Sci. Museum.
cephalophora Muhl.
sparganioides Muhl.
vulpinoidea Michx.
diandra Schrank. Deerfield, E. Hitchcock.
diandra Schrank. var. *ramosa* (Boott.) Fernald. Deerfield, E. Hitchcock.
stipata Muhl.
crinita Lam.
torta Boott.
stricta Lam.
aurea Nutt. Conway, H. G. Jesup.
pauciflora Lightf. Ashfield, Porter.
leptalea Wahlenb.
polygama Schkuhr.
triceps Michx. var. *hirsuta* (Willd.) Bailey.
virescens Muhl.
formosa Dewey. Amherst, Hitchc. Catal.;
Davisii Schwein & Torr. North Hadley, E. Tuckerman.
gracillima Schwein.
Backii Boott. Mt. Tom, Prof. W. D. Whitney.
umbellata Schkuhr.
varia Muhl.
novae-angliae Schwein.
pennsylvanica Lam.
pubescens Muhl.
livida (Wahlenb.) Willd.
tetanica Schkuhr. Amherst, Hitchc. Cata'.
polymorpha Muhl. Westfield, Rev. Dr. Davis.
pallescent L.

- C. limosa* L. Ashfield, Porter.
prasina Wahlenb.
pedunculata Muhl. Mt. Holyoke, etc., E. Tuckerman; Mt. Toby,
H. G. Jesup.
plantaginea Lam. Mt. Toby, H. G. Jesup; Rocky Mountain,
Greenfield, Dr. N. A. Cobb.
platyphylla Carey. Mt. Holyoke, etc., E. Tuckerman and H. G.
Jesup; Mt. Toby, H. G. Jesup.
laxiculmis Schwein. Amherst, etc.
digitalis Willd.
laxiflora Lam.
laxiflora Lam. var. *patulifolia* (Dewey) Carey.
laxiflora Lam. var. *blanda* (Dewey) Boott.
conoidea Schkuhr.
grisea Wahlenb.
glaucodea Tuckerm. Mt. Holyoke, etc., E. Tuckerman and H.
G. Jesup.
granularis Muhl. Amherst, E. Hitchcock, and northward.
flava L.
longirostris Torr.
arctata Boott. Leyden, E. Hitchcock; Easthampton, Dr. N. A.
Cobb.
debilis Michx.
debilis Michx. var. *Rudgei* Bailey.
scabrata Schwein.
filiformis L.
lanuginosa Michx.
vestita Willd.
trichocarpa Muhl. Amherst, Hitchc. Catal.
riparia W. Curtis.
squarrosa L. Hadley, E. Hitchcock; South Hadley, H. G.
Jesup.
comosa Boott.
hystericina Muhl.
lurida Wahlenb. Fernald in *Rhodora*, Vol. III, p. 56.
lurida X *lupulina* Bailey. Fernald in *Rhodora*, Vol. III, p. 56.
retrorsa Schwein.
lupulina Muhl. Amherst, Fernald: in *Rhodora*, Vol. III, p. 56.
intumescens Rudge.
folliculata L.
vesicaria L.
rostrata Stokes var. *utriculata* (Boott.) Bailey.
Tuckermani Dewey.

ARACEAE

- Arisaema* Martins. Indian Turnip. Dragon Arum.
triphyllum (L.) Schott. Indian Turnip. Jack-in-the-Pulpit.
Dracontium (L.) Schott. Green Dragon. Dragon Root. Deerfield. *Rhodora*, Vol. XII, p. 169. Sunderland, Belchertown, South Hadley. This rare plant is now extinct in some of the former stations.
- Peltandra* Raf. Arrow Arum.
virginica (L.) Kunth. Belchertown.
- Calla* L. Water Arum.
palustris L.
- Symplocarpus* Salisb. Skunk Cabbage.
foetidus (L.) Nutt.
- Orontium* L. Golden Club.
aquaticum L. Hampton pond, E. Tuckerman; Southwick, Porter; Springfield, S. Stebbins. Rare; Westfield; Slow brook, east of Mt. Tom, Dr. N. A. Cobb.
- Acorus* L. Sweet Flag. Calamus.
Calamus L.

LEMNACEAE

- Spirodela* Schleiden.
polyrhiza (L.) Schleid.
- Lemna* L. Duckweed. Duck's-meat.
trisulca L.
minor L.

ERIOCAULACEAE

- Eriocaulon* [Gronov.] L. Pipewort.
articulatum (Huds.) Morong.

XYRIDACEAE

- Xyris* [Gronov.] L. Yellow-eyed Grass.
montana Ries. Lock's pond, Shutesbury, etc.; E. Tuckerman, H. G. Jesup.
caroliniana Walt. Indian Orchard. Herb. Spfld Sci. Museum.
flexuosa Muhl. Shutesbury, H. G. Jesup. Bay St., Springfield, etc.

COMMELINACEAE

- Tradescantia* (Rupp.) L. Spiderwort.
virginiana L. Occasionally escaped.
- Commelina* (Plum.) L.
 COMMUNIS L. Springfield, L. Andrews.

PONTEDERIACEAE

- Pontederia* L. Pickerel Weed.
cordata L.
cordata L. var. *angustifolia* Torr.
Heteranthera R. and P. Mud Plantain.
dubia (Jacq.) MacM.

JUNCACEAE

- Juncus* [Tourn.] L. Rush. Bog Rush.
bufonius L.
tenuis Willd.
filiformis L. Hadley meadows, E. Tuckerman.
effusus L. Common or Soft Rush.
brevicaudatus (Engelm.) Fernald. Mt. Toby, H. G. Jesup. Spring-field, L. Andrews.
canadensis J. Gay. Mt. Toby, H. G. Jesup.
pelocarpus Meyer. Shores of Lock's pond, etc., E. Tuckerman;
 Leverett pond, H. G. Jesup. Indian Orchard.
nodosus L. Hockanum, Whitmore's Ferry, etc., E. Tuckerman.
acuminatus Michx.
articulatus L. Mill Hollow, Amherst, etc., E. Tuckerman and H. G. Jesup.
marginatus Rostk. Amherst, etc., E. Tuckerman.
Luzula DC. Wood Rush.
saltuensis Fernald.
campestris (L.) DC.

LILIACEAE

- Veratrum* [Tourn.] L. False Hellebore.
viride Ait. American White Hellebore. Indian Poke.
Uvularia L. Bellwort.
perfoliata L.
Oakesia Watson.
sessilifolia (L.) Watson.
Allium [Tourn.] L. Onion. Garlic.
tricoccum Ait. Wild Leek.
canadense L. Wild Garlic.
Hemerocallis L. Day Lily.
 FULVA L. Common Day Lily. Escaped from cultivation.
Lilium L. Lily.
philadelphicum L. Wild Orange-red Lily or Wood Lily.
superbum L. Turk's-cap Lily.
canadense L. Wild Yellow Lily.

- Erythronium* L. Dog's tooth Violet.
americanum Ker. Yellow Adder's Tongue.
- Ornithogalum* [Tourn.] L. Star of Bethlehem.
 UMBELLATUM L. More or less common throughout the range.
- Muscari* [Tourn.] Mill. Grape Hyacinth.
botryoides (L.) Mill. Amherst. Persistent for many years.
- Asparagus* [Tourn.] L. Asparagus.
officinalis L. Garden Asparagus.
- Clintonia* Raf.
borealis (Ait.) Raf.
- Smilacina* Desf. False Solomon's Seal.
racemosa (L.) Desf. False Spikenard.
stellata (L.) Desf.
trifolia (L.) Desf. Pelham and Cummington, E. Hitchcock.
 Plumtrees, Sunderland.
- Maianthemum* (Weber in.) Wiggers.
canadense Desf.
- Streptopus* Michx. Twisted Stalk.
amplexifolius (L.) DC. Pelham, Deerfield, E. Tuckerman. Mt.
 Toby.
roseus Michx. Mt. Toby, etc.
- Polygonatum* [Tourn.] Hill. Solomon's Seal.
biflorum (Walt.) Ell. Small Solomon's Seal.
commutatum (R. and S.) Dietr. Great Solomon's Seal.
- Convallaria* L. Lily of the Valley.
 MAJALIS L. Escaped from cultivation.
- Medeola* [Gronov.] L. Indian Cucumber Root.
virginiana L.
- Trillium* L. Wake Robin. Birthroot.
erectum L.
grandiflorum (Michx.) Salisb. Pelham, E. Hitchcock. Not found
 in recent years.
cernuum L.
undulatum Willd. Painted Trillium.
- Aletris* L. Colic Root.
farinosa L.
- Smilax* [Tourn.] L. Green Brier.
herbacea L. Carrion Flower.
rotundifolia L. Common Green Brier.

AMARYLLIDACEAE

- Hypoxis* L. Star Grass.
hirsuta (L.) Coville.

IRIDACEAE

- Iris* [Tourn.] L. Fleur-de-lis.
versicolor L. Larger Blue Flag.
germanica L. Fleur-de-lis. Mt. Toby, H. L. Clark in *Rhodora*,
 Vol. I, page 165.
Belamcanda Adans. Blackberry Lily.
chinensis (L.) DC. Escaped, South Hadley, Mrs. C. S. Phelps.
Sisyrinchium L. Blue-eyed Grass.
mucronatum Michx.
angustifolium Mill.
gramineum Curtis.
atlanticum Bicknell.

ORCHIDACEAE

- Cypripedium* L. Lady's Slipper. Moccasin Flower.
arietinum R. Br. Ram's Head Lady's Slipper. Mt. Toby, W. S. Clark. This is the only station which we know in this region, and it is often found here quite plentifully.
parviflorum Salisb. Smaller Yellow Lady's Slipper. Mt. Holyoke, E. Tuckerman; Shelburne, F. G. Tuckerman; Hawley, Buckland, W. D. Forbes; Northfield, Shutesbury, etc. A cross apparently between *parviflorum* and *pubescens* is found on the banks of the Conn. river at Gill, E. H. Sharpe.
parviflorum Salisb. var. *pubescens* (Willd.) Knight. Larger Yellow Lady's Slipper.
hirsutum Mill. Showy Lady's Slipper. Deerfield, E. Hitchcock; Easthampton, W. S. Clark; Mt. Holyoke, H. G. Jesup; Hawley, W. D. Forbes; Mt. Toby, C. S. Plumb, 1880. This plant has become exterminated in many of the stations enumerated above due to the activities of professional collectors.
acaule Ait. Stemless Lady's Slipper. A white flowered form is frequently found.
Orchis [Tourn.] L.
spectabilis L. Showy Orchis.
Habenaria Willd. Rein Orchis. Fringed Orchis.
bracteata (Willd.) R. Br. Rather common in mountainous regions.
flava (L.) Gray.
hyperborea (L.) R. Br.
dilatata (Pursh.) Gray. Plumtrees Swamp, Sunderland, etc.

H. clavellata (Michx.) Spreng.

Hookeri Torr.

orbiculata (Pursh.) Torr.

ciliaris (L.) R. Br. Yellow Fringed Orchis. East Amherst, C.H. Hitchcock; Easthampton, W. S. Clark. Rare and extremely local plant; not collected for several years in this region.

blephariglottis (Willd.) Torr. White Fringed Orchis.

blephariglottis (Willd.) Torr. var. *holopetala* (Lindl.) Gray. Hawley, W. D. Forbes.

blephariglottis (Willd.) Torr. X *H. lacera* (Michx.) R. Br. A form has been noted by W. D. Forbes in Hawley, a cross between the above named.

lacera (Michx.) R. Br. Ragged Fringed Orchis.

psycodes (L.) Sw. This species much resembles the following. Both are called Purple Fringed Orchis.

fimbriata (Ait.) R. Br.

Pogonia Juss.

ophioglossoides (L.) Ker.

trianthophora (Siv.) BSP. Deerfield, E. Hitchcock; Conway.

verticillata (Willd.) Nutt. Amherst, Deerfield, E. Tuckerman; Mt. Holyoke (Notch); Longmeadow, Springfield, West Northfield; N. Leverett, Miss Ruby Hemenway; Easthampton, W. S. Clark, 1844; Belchertown, Mrs. E. W. Carpenter and Marion Thompson.

affinis Aust. Holyoke range, H. L. Clark; in *Rhodora*, Vol. I, p. 165.

Calopogon R. Br.

pulchellus (Sw.) R. Br.

Arethusa [Gronov.] L.

bulbosa L.

Spiranthes Richard. Ladies' Tresses.

gracilis (Bigelow) Beck.

vernalis Engelm. and Gray. Buckland, W. D. Forbes.

lucida (H. H. Eaton) Ames. Amherst, G. L. Goodale; Conway, H. G. Jesup; Buckland, W. D. Forbes; Colrain, E. F. Williams.

cernua (L.) Richard.

Epipactis (Haller) Boehm. Rattlesnake Plantain.

repens (L.) Crantz.

repens (L.) Crantz. var. *ophioides* (Fernald) A. A. Eaton. Southwick; M. L. Fernald in *Rhodora*, Vol. I, p. 6.

tesselata (Lodd) A. A. Eaton. Springfield, L. Andrews.

decipiens (Hook) Ames. Buckland, W. D. Forbes. But one specimen of the plant found by Mr. Forbes.

pubescens (Willd.) A. A. Eaton.

- Listera** R. Br. Twayblade.
cordata (L.) R. Br. Plainfield, Porter.
- Corallorrhiza** [Haller] R. Br. Coral Root.
trifida Chatelain. Amherst, W. S. Clark; Buckland, W. D. Forbes; Sunderland, Plumtrees Swamp; Leverett, Mt. Toby and Pelham.
maculata Raf. Easthampton, E. Hitchcock; Mt. Toby, H. G. Jesup; N. Leverett, R. E. Torrey; Buckland, W. D. Forbes; Mt. Holyoke, Amherst.
odontorrhiza Nutt.
- Microstylis** (Nutt.) Eaton. Adder's Mouth.
monophyllos (L.) Lindl. Hawley, W. D. Forbes.
unifolia (Michx.) BSP. Deerfield, E. Hitchcock; Shutesbury, E. H. Sharpe; Springfield, Dr. W. H. Chapin; Belcherstown, R. E. Torrey.
- Liparis** Richard. Twayblade.
liliifolia (L.) Richard.
Loeselii (L.) Richard. Plumtrees swamp, Sunderland, A. V. Osmun; Amherst, H. L. Clark; Mt. Toby.
- Aplectrum** (Nutt.) Torr. Putty Root. Adam-and-Eve.
hyemale (Muhl.) Torr. Mt. Holyoke, Conway, E. Hitchcock; Buckland, W. D. Forbes.
- Tipularia** Nutt. Crane Fly Orchis.
discolor (Pursh) Nutt. Deerfield, E. Hitchcock. Probably not in our range; never verified by other collectors.
-

DICOTYLEDONEAE

SALICACEAE

- Salix** [Tourn.] L. Willow. Osier.
nigra Marsh. Black Willow.
nigra Marsh. var. *falcata* (Pursh) Torr. Springfield, L. Andrews.
lucida Muhl. Shining Willow.
FRAGILIS L. Crack Willow.
ALBA L. White Willow.
ALBA L. var. **VITELLINA** (L.) Koch.
Babylonica L. Weeping Willow. Sometimes escapes to river banks, etc.
longifolia Muhl. Sand Bar Willow. Islands of Conn. river, H. G. Jesup.
cordata Muhl.

- S.** *pedicellaris* Pursh. Deerfield, E. Tuckerman.
discolor Muhl. Glaucous Willow.
humilis Marsh. Prairie Willow.
tristis Ait. Dwarf Gray Willow.
sericea Marsh. Silky Willow.
rostrata Richards.
 PURPUREA L. Purple Willow. Near Conway, H.G. Jesup; Glenwood, Springfield.
- Populus** [Tourn.] L. Poplar. Aspen.
alba L. White Poplar. Silver Leaved Poplar.
tremuloides Michx. American Aspen.
grandidentata Michx. Large-toothed Aspen.
balsamifera L. Balsam Poplar.
candicans Ait. Balm of Gilead.
deltoides Marsh. Cottonwood. Necklace Poplar.
 NIGRA L. Black Poplar. Occasionally spreading by root suckers. var. ITALICA Du Roi. Rarely, if ever, spreading.

MYRICACEAE

Myrica L.

- Gale* L. Sweet Gale. Gill, E. H. Sharpe; Shutesbury, R. E. Torrey; Belchertown, etc.
carolinensis Mill. Bayberry. Wilbraham, E. Longfellow, Dr. W. H. Chapin; Conway, etc. Much more common near the coast.
asplenifolia L. Sweet Fern.

JUGLANDACEAE

Juglans L. Walnut.

- cinerea* L. Butternut.
nigra L. Black Walnut. Native in Amherst, etc., but rare in our range.

Carya Nutt. Hickory.

- ovata* (Mill.) K. Koch. Shagbark Hickory.
alba (L.) K. Koch. Mocker Nut.
glabra (Mill.) Spach. Pig Nut.
cordiformis (Wang.) K. Koch. Bitter Nut.

BETULACEAE

- Corylus* [Tourn.] L. Hazelnut. Filbert.
americana Walt. Hazelnut. Prof. S. T. Maynard discovered
 some years ago a purple-leaved hazelnut near
 Mt. Toby, which has been propagated as a horti-
 cultural variety.
rostrata Ait. Beaked Hazelnut.
Ostrya (Mich.) Scop. Leverwood.
virginiana (Mill.) K. Koch. Hop Hornbeam.
Carpinus [Tourn.] L. Ironwood.
caroliniana Walter. Blue or Water Beech.
Betula [Tourn.] L. Birch.
lenta L. Sweet or Black Birch.
lutea (Michx.) f. Yellow or Gray Birch.
populifolia Marsh. White or Gray Birch.
alba L. var. *papyrifera* (Marsh) Spach. Paper, Canoe or White
 Birch.
pumila L. Low or Swamp Birch. Amherst region. Eaton Man.
Alnus [Tourn.] Hill. Alder.
crispa (Ait.) Pursh. Conway; Deerfield, H. G. Jesup.
mollis Fernald. Downy Green Alder. Buckland, M. L. Fernald in
Rhodora, Vol. VI, p. 163.
incana (L.) Muench. Speckled or Hoary Alder.
rugosa (Du Roi) Spreng. Smooth Alder.

FAGACEAE

- Fagus* [Tourn.] L. Beech.
grandifolia Ehrh. More common on our western border, where
 it forms large forests.
Castanea [Tourn.] Hill. Chestnut.
dentata (Marsh.) Borkh.
Quercus [Tourn.] L. Oak.
alba L. White Oak.
bicolor Willd. Swamp White Oak.
prinoides Willd. Chinquapin Oak.
Prinus L. Chestnut Oak.
rubra L. Red Oak.
palustris Muench. Pin Oak. More or less common in Conn.
 Valley lowlands.
coccinea Muench. Scarlet Oak.
velutina Lam. Yellow-barked or Black Oak.
ilicifolia Wang. Bear or Black Scrub Oak.

URTICACEAE

- Ulmus* [Tourn.] L. Elm.
 fulva Michx. Slippery Elm. Local.
 americana L. American Elm.
- Celtis* [Tourn.] L. Nettle-tree. Hackberry.
 occidentalis L. Sugarberry. Local.
 occidentalis L. var. *pumila* Muhl. Mt. Holyoke, H. G. Jesup.
 occidentalis L. var. *crassifolia* (Lam.) Gray. Hadley, E. Tuckerman; Amherst.
- Cannabis* [Tourn.] L. Hemp.
 SATIVA L.
- Humulus* L. Hop.
 Lupulus L. Common Hop.
 japonicus Sieb. and Zucc. Clay-pit dumping ground, Springfield, L. Andrews.
- Morus* [Tourn.] L. Mulberry.
 rubra L. Red Mulberry. Uncommon.
 ALBA L. White Mulberry. Amherst, etc.
- Urtica* [Tourn.] L. Nettle.
 gracilis Ait.
 URENS L.
- Laportea* Gaud. Wood Nettle.
 canadensis (L.) Gaud.
- Pilea* Lindl. Richweed.
 pumila (L.) Gray.
- Boehmeria* Jacq. False Nettle.
 cylindrica (L.) Sw.
- Parietaria* [Tourn.] L. Pellitory.
 pennsylvanica Muhl. Sugar Loaf, Mt. Toby, etc.

SANTALACEAE

- Comandra* Nutt. Bastard Toad-flax.
 umbellata (L.) Nutt.

LORANTHACEAE

- Arceuthobium* Bieb.
 pusillum Peck. Dwarf Mistletoe. Parasitic on Black Spruce.

ARISTOLOCHIACEAE

- Asarum* [Tourn.] L. Wild Ginger.
 canadense L.
- Aristolochia* [Tourn.] L. Birthwort.
 Serpentaria L. Virginia Snakeroot. Included in Dr. Tuckerman's list as from Turners Falls, but doubtful.

POLYGONACEAE

Rumex L. Dock. Sorrel.

Patentia L. Patience Dock. Rather uncommon.

Britannica L. Great Water Dock. Amherst, etc., H. G. Jesup.

CRISPUS L. Yellow Dock.

SANGUINEUS L. See Britton and Brown's Ill. Flora of n. U. S. and Can., Vol. I, p. 551.

ELONGATUS Guss. Orchard St., Springfield, L. Andrews.

altissimus Wood. Pale Dock. Herb. Spfld Sci. Museum.

verticillatus L. Swamp Dock. Granby, H. G. Jesup.

OBTUSIFOLIUS L. Bitter Dock.

ACETOSA L. Garden Sorrel. Grass land. Common at Amherst, etc.

HASTATULUS Baldw. Roadsides, Amherst, S. T. Maynard.

ACETOSELLA L. Field or Sheep Sorrel.

Polygonum [Tourn.] L. Knotweed.

aviculare L.

aviculare L. var. *vegetum* Ledeb.

erectum L.

tenue Michx.

lapathifolium L.

amphibium L.

Muhlenbergii (Meisn.) Wats. Springfield, L. Andrews.

pennsylvanicum L.

Careyi Olney. East Amherst, etc., C. H. Hitchcock.

Hydropiper L. Common Smartweed.

acre HBK. Water Smartweed.

acre HBK. var. *leptostachyum* Meisn. Herb. Spfld Sci. Museum, L. Andrews.

ORIENTALE L. Prince's Feather.

PERSICARIA L. Lady's Thumb. Common in barnyards, etc.

hydropiperoides Michx. Mild Water Pepper.

virginianum L.

arifolium L. Halberd-leaved Tear-thumb.

sagittatum L. Arrow-leaved Tear-thumb.

CONVOLVULUS L. Black Bindweed.

cilinode Michx.

scandens L. Climbing False Buckwheat.

cuspidatum Sieb. and Zucc. Springfield, L. Andrews. Two species, *P. Sachalinense* Schmidt and *cuspidatum*, have been cultivated at the Mass. Agricultural College for 15 years. The latter is well established; the former, termed Sacaline, does not show a tendency to become so. Both were introduced from Japan as forage plants.

Fagopyrum [Tourn.] L. Buckwheat.

ESCULENTUM Muench. Buckwheat. In waste places and persisting after cultivation.

Polygonella Michx.

articulata (L.) Meisn.

CHENOPODIACEAE

Kochia Roth.

Scoparia (L.) Schrad. Springfield, escaped from gardens, L. Andrews.

Chenopodium [Tourn.] L.

BOTRYS L. Jerusalem Oak.

ambrosioides L. Mexican Tea. Springfield, L. Andrews.

capitatum (L.) Asch. Strawberry Blite. Rare, E. Hitchcock.

HYBRIDUM L. Maple-leaved Goosefoot.

ALBUM L. Lamb's Quarters.

ALBUM L. var. VIRIDE (L.) Moq. Springfield, L. Andrews.

Salsola L. Saltwort.

Kali L. var. *tenuifolia* G. F. W. Mey. Russian Thistle. Occasionally on railroad banks, etc.; the seed coming in with grass seed and also by western freight. Slightly established at B. & M. R. R. station, Amherst, S. C. Brooks (1910), and at Springfield, Dr. W. H. Chapin.

AMARANTHACEAE

Amaranthus [Tourn.] L. Amaranth.

RETROFLEXUS L. Green Amaranth; Pigweed.

hybridus L.

hybridus L. forma *hypochondriacus* L. Green Amaranth. Springfield, L. Andrews.

paniculatus L. Purple Amaranth. Springfield, L. Andrews.

GRAECIZANS L. Tumble Weed.

spinousus L. Thorny Amaranth. Herb. Spfld Sci. Museum, and Herb. Mt. Holyoke College.

PHYTOLACCACEAE

Phytolacca [Tourn.] L. Pokeweed.

decandra L.

NYCTAGINACEAE

Oxybaphus L' Her.

nyctagineus (Michx.) Sweet. Springfield, L. Andrews.

ILLECEBRACEAE

Scleranthus L. Knawel.

ANNUUS L.

Anychia Michx. Forked Chickweed.

canadensis (L.) BSP.

AIZOACEAE

Mollugo L. Indian Chickweed.

VERTICILLATA L. Carpet Weed.

CARYOPHYLLACEAE

Spergularia J. and C. Presl. Sand Spurrey.

rubra (L.) J. and C. Presl. Common on roadsides.

Spergula L.

ARVENSIS L. Corn Spurrey.

Sagina L. Pearlwort.

decumbens (Ell.) T. and G. Springfield, M. L. Owen (1883); Amherst, H. G. Jesup.

procumbens L.

Arenaria L. Sandwort.

lateriflora L.

SERPILLIFOLIA L. Thyme-leaved Sandwort.

stricta Michx.

Stellaria L. Chickweed. Starwort.

borealis Bigel.

uliginosa Murr. South Deerfield, H. G. Jesup.

longifolia Muhl.

GRAMINEA L. Amherst, etc.; now common.

MEDIA (L.) Cyrill. Common Chickweed.

Cerastium L. Mouse-ear Chickweed.

arvense L. Field Mouse-ear Chickweed. Plumtrees, Sunderland; Mt. Toby.

arvense L. var. *oblongifolium* (Torr.) Hollick and Britton. Mt. Tom, June, 1882; Herb. Mt. Holyoke College.

VULGATUM L. Common Mouse-ear Chickweed. Now very common, but included by mistake in Prof. Tuckerman's list; he not having observed it in 1875.

VISCOSUM L.

nutans Raf. Hadley, etc.

Agrostemma L. Corn Cockle.

Githago L. In grain fields, etc.

Lychnis [Tourn.] L. Campion.

FLOS-CUCULI L. Ragged Robin. Found in grass lands. Amherst, etc. Spreading, and becoming well established.

DIOICA L. Red Campion. Roadsides, etc.

alba Mill. White Campion. Amherst, A. V. Osmun. Springfield, L. Andrews.

Silene L. Catchfly.

antirrhina L. Sleepy Catchfly.

Armeria L. Sweet William Catchfly. Springfield, L. Andrews.

noctiflora L. Night-flowering Campion.

pennsylvanica Michx. Wild Pink.

stellata (L.) Ait. f. Starry Campion. South Hadley.

LATIFOLIA (Mill.) Britten & Rendle. Bladder Campion. Amherst, etc.

Saponaria L.

OFFICINALIS L. Bouncing Bet.

Gypsophila L.

muralis L. Springfield, etc.

paniculata L. Tall Gypsophyll. Springfield, L. Andrews.

See Britton & Brown's *Illustrated Flora*, Vol. II, p. 17.

Dianthus L. Pink. Carnation.

ARMERIA L. Deptford Pink.

PORTULACACEAE

Claytonia [Gronov.] L. Spring Beauty.

virginica L.

caroliniana Michx. Amherst, H. G. Jesup.

Portulaca [Tourn.] L. Purslane.

OLERACEA L. Common Purslane. A pernicious weed.

grandiflora Hook. Occasionally escaped.

CERATOPHYLLACEAE

Ceratophyllum L. Hornwort.

demersum L. Ponds, etc.

NYMPHAEACEAE

Nymphaea [Tourn.] L. Yellow Pond Lily. Spatter-dock.

advena Ait. Cow Lily.

microphylla Pers. Conn. river, ponds, etc.

Castalia Salisb. Water Lily.

tetragona Georg. Pansy Park, Belchertown. Escaped from cultivation. L. W. Goodell.

odorata (Ait.) Woodville & Wood. Sweet-scented Water Lily.

Brasenia Schreber. Water Shield.

Schreberi Gmel.

RANUNCULACEAE

Ranunculus [Tourn.] L. Crowfoot. Buttercup.

circinatus Sibth. Stiff Water Crowfoot. Belchertown; Herb. Mt. Holyoke College.

aquatis L. var. *capillaceus* DC. Common White Water Crowfoot.

delphinifolius Torr. Yellow Water Crowfoot.

laxicaulis (T. & G.) Darby. Water Plaintain. Spearwort.

Flammula L. var. *reptans* (L.) Mey. Creeping Spearwort. Shore of Conn. river.

sceleratus L. Cursed Crowfoot.

abortivus L. Small-flowered Crowfoot.

recurvatus Poir. Hooked Crowfoot.

fascicularis Muhl. Early Crowfoot.

septentrionalis Poir. Swamp Buttercup.

hispidus Michx. Longmeadow; Herb. Spfld Sci. Museum.

pennsylvanicus L. f. Bristly Crowfoot.

BULBOSUS L. Bulbous Buttercup.

ACRIS L. Tall Buttercup.

ACRIS L. var. **STEVENI** (Andrz.) Lange. Northampton; M. L. Fernald in *Rhodora*, Vol. I, p. 229.

Thalictrum [Tourn.] L. Meadow Rue.

dioicum L. Early Meadow Rue.

polygamum Muhl. Tall Meadow Rue.

Anemonella Spach.

thalictroides (L.) Spach. Rue Anemone.

Hepatica (Rupp.) Hill. Liverleaf. Hepatica.

triloba Chaix.

acutiloba DC. Conway, etc., H. G. Jesup; Amherst, E. L. Morris; Mt. Holyoke, etc.

Anemone [Tourn.] L. Anemone.

cylindrica Gray. Mt. Toby, H. G. Jesup, Aug., 1872; Sunderland.

virginiana L.

canadensis L. South Hadley, G. L. Goodale.

quinquefolia L. Wood Anemone.

- Clematis* L. Virgin's Bower.
virginiana L.
verticillaris DC. Greenfield, F. G. Tuckerman; Notch, Mt. Holyoke; Table Mountain, Mt. Toby; Mt. Tom; South Hadley; Rattlesnake Gutter, Leverett.
- Caltha* [Rupp.] L. Marsh Marigold.
palustris L.
- Coptis* Salisb. Goldthread.
trifolia (L.) Salisb.
- Aquilegia* [Tourn.] L. Columbine.
canadensis L. Wild Columbine.
- Cimicifuga* L. Bugbane.
racemosa (L.) Nutt. Black Snakeroot. Black Cohosh. Goshen, E. Hitchcock.
- Actaea* L. Baneberry. Cohosh.
rubra (Ait.) Willd. Red Baneberry.
alba (L.) Mill. White Baneberry.

MAGNOLIACEAE

- Magnolia* L.
tripetala L. Umbrella Tree. Dr. W. H. Chapin has observed several of these trees, which have existed for a number of years on the shores of a pond in Springfield; and also in Edgewood Swamp stands a tree about nine years old. Both these stations are at least two miles away from any cultivated *M. tripetala* trees, and were probably seeded in through the agency of birds.
- Liriodendron* L. Tulip Tree.
Tulipifera L. Deerfield, E. Hitchcock; Gill, Bernardston, Southampton, Agawam, Huntington, etc.

MENISPERMACEAE

- Menispermum* [Tourn.] L. Moonseed.
canadense L.

BERBERIDACEAE

- Podophyllum* L. May Apple. Mandrake.
peltatum L. South Amherst, E. Hitchcock.
- Caulophyllum* Michx. Blue Cohosh.
thalictroides (L.) Michx. Pappoose Root.
- Berberis* [Tourn.] L. Barberry.
 VULGARIS L. Common Barberry. Pastures, etc. More common near the coast.

LAURACEAE

Sassafras Nees.

variifolium (Salisb.) Ktze.

Benzoin Fabric. Wild Allspice. Fever Bush.

aestivale (L.) Nees. Spice Bush. Benjamin Bush.

PAPAVERACEAE

Sanguinaria (Dill.) L. Blood Root.

canadensis L.

Chelidonium [Tourn.] L. Celandine.

MAJUS L.

FUMARIACEAE

Adlumia Raf. Climbing Fumitory.

fungosa (Ait.) Greene. Mt. Toby, etc.

Dicentra Bernh.

Cucullaria (L.) Bernh. Dutchman's Breeches. Westfield, C. S. Plumb; North Amherst, Northampton, South Hadley.

canadensis (Goldie) Walp. Squirrel Corn. Conway, G. L. Goodale; Leverett, E. H. Sharpe.

Corydalis (Dill.) Medic.

sempervirens (L.) Pers. Pale Corydalis.

Fumaria [Tourn.] L. Fumitory.

OFFICINALIS L. Common Fumitory.

CRUCIFERAE

Berteroa DC.

INCANA (L.) DC. Springfield, Mrs. A. J. Smith and Dr. W. H. Chapin; Amherst, R. E. Torrey. Introduced in seed and spreading rapidly.

Alyssum [Tourn.] L.

alyssoides L. Amherst, etc.

Lepidium [Tourn.] L. Pepperwort. Peppergrass.

virginicum L. Wild Peppergrass.

apetalum Willd. Springfield, Miss M. L. Owen.

CAMPESTRE (L.) R. Br. Amherst.

Capsella Medic. Shepherd's Purse.

BURSA-PASTORIS (L.) Medic.

Camelina Crantz. False Flax.

SATIVA (L.) Crantz.

microcarpa Andrz. Greenfield, E. F. Williams. *Rhodora*, Vol. XII, p. 169.

Raphanus [Tourn.] L. Radish.

RAPHANISTRUM L. Wild Radish. Jointed Charlock.

Brassica [Tourn.] L. Mustard. Turnip.

ALBA (L.) Boiss. White Mustard.

juncea (L.) Cosson. Herb. Spfld Sci. Museum.

NIGRA (L.) Koch. Black Mustard.

campestris L. Rutabaga. More or less common in waste places.

Conringia (Heist.) Link. Hare's-ear Mustard.

orientalis (L.) Dumort. Belchertown, R. E. Torrey.

Sisymbrium [Tourn.] L. Hedge Mustard.

OFFICINALE (L.) Scop.

officinale (L.) Scop. var. *leiocarpum* DC. Herb. Spfld Sci. Mus.

Erysimum [Tourn.] L. Treacle Mustard.

cheiranthoides L. Worm-seed Mustard. Mt. Toby, H. G. Jesup; Sunderland.

Radicula (Dill.) Hill. Water Cress.

NASTURTIUM-AQUATICUM (L.) Britten & Rendle. True Water Cress. More or less common in brooks.

SYLVESTRIS (L.) Druce. Yellow Cress.

palustris (L.) Muench. Marsh Cress.

palustris (L.) Muench. var. *hispida* (Desv.) Robinson. Leverett pond, R. E. Torrey.

ARMORACIA (L.) Robinson. Horse-radish. Persistent and spreading around old dwellings.

Barbarea R. Br. Winter Cress.

VULGARIS R. Br. Common Winter Cress. Yellow Rocket.

stricta Andr. Longmeadow; Herb. Spfld Sci. Museum.

Dentaria [Tourn.] L. Toothwort. Pepper-root.

diphylla Michx.

maxima Nutt. Springfield, Miss G. L. Pettis.

laciniata Muhl. Deerfield, E. Hitchcock; Springfield, Miss G. L. Pettis; Amherst and Sunderland.

Cardamine [Tourn.] L. Bitter Cress.

bulbosa (Schreb.) BSP. Spring Cress.

pratensis L. Cuckoo Flower. Amherst, A. V. Osmun; Conway.

parviflora L.

pennsylvanica Muhl.

Arabis L. Rock Cress.

lyrata L. Mt. Tom, S. Stebbins.

Drummondii Gray.

hirsuta (L.) Scop.

laevigata (Muhl.) Poir.

canadensis L. Sickie-pod.

Isates

tinctoria L. Dyer's Wood. Amherst, Mass. Agr. College grounds. See *Cyclopedia of Am. Hort.*, Bailey, p. 836.

SARRACENIACEAE

- Sarracenia* [Tourn.] L.
purpurea L. Pitcher-plant.

DROSERACEAE

- Drosera* L. Sundew.
rotundifolia L. Round-leaved Sundew.
longifolia L.

PODOSTEMACEAE

- Podostemum* Michx. River Weed.
ceratophyllum Michx. In Conn. river, E. Hitchcock; South
 Hadley, Miss L. W. Shattuck.

CRASSULACEAE

- Penthorum* [Gronov.] L. Ditch Stonecrop.
sedoides L.
Sedum [Tourn.] L. Stonecrop. Orpine.
 ACRE L. Mossy Stonecrop. Occasional.
ternatum Michx. Sunderland.
reflexum L. Roadside, Leverett, H. G. Jesup.
 PURPUREUM Tausch. Garden Orpine. Live-for-ever. Roadsides.
Sempervivum L. Houseleek.
tectorum L.

SAXIFRAGACEAE

- Saxifraga* [Tourn.] L. Saxifrage.
pennsylvanica L. Swamp Saxifrage.
virginiensis Michx. Early Saxifrage.
Tiarella L. False Miterwort.
cordifolia L.
Mitella [Tourn.] L. Miterwort. Bishop's Cap.
diphylla L.
nuda L. East Amherst, H. G. Jesup; Plumtrees Swamp, C. S.
 Putnam.
Chrysosplenium [Tourn.] L. Golden Saxifrage.
americanum Schwein.
Parnassia [Tourn.] L. Grass of Parnassus.
caroliniana Michx.

Ribes L. Currant. Gooseberry.

Cynosbati L. Prickly Gooseberry. Dogberry. Conway, Mt. Tom, South Hadley.

rotundifolium Michx. West River Mt., E. Hitchcock.

oxyacanthoides L. Smooth Gooseberry.

floridum L'Her. Wild Black Currant.

prostratum L'Her. Skunk Currant. Belchertown, H. G. Jesup.

VULGARE Lam. Red Currant. Escaped from gardens.

aureum Pursh. Missouri or Buffalo Currant. Escaped from cultivation.

HAMAMELIDACEAE

Hamamelis L. Witch Hazel.

virginiana L.

PLATANACEAE

Platanus [Tourn.] L. Sycamore. Buttonwood.

occidentalis L. River valleys. A noteworthy specimen of this tree, 20 feet in circumference, stands on Sunderland street. This is said to be the largest sycamore tree in Massachusetts.

ROSACEAE

Spiraea [Tourn.] L.

latifolia Borkhr. Meadow-sweet.

tomentosa L. Hardhack. Steeple Bush.

Sorbaria A. Br.

sorbifolia (L.) A. Br. Amherst, N. Hadley road, W. D. Barlow.

Pyrus [Tourn.] L.

MALUS L. Apple. Frequently spontaneous.

arbutifolia (L.) L. f. Chokeberry.

arbutifolia (L.) L. f. var. *atropurpurea* (Britton) Robinson.

melanocarpa (Michx.) Willd. Northampton.

americana (Marsh.) DC. American Mountain Ash.

AUCUPARIA (L.) Ehrh. European Mountain Ash. Rowan Tree. Amherst, etc., Escaped.

Amelanchier Medic. Shad Bush.

sanguinea (Pursh.) DC. Millers Falls, Montague; K. M. Wiegand in *Rhodora*, Vol. XIV, p. 138.

stolonifera Wiegand. Millers Falls, Montague; *Rhodora*, Vol. XIV, p. 144.

- A. canadensis** (L.) Medic. *Rhodora*, Vol. XIV, p. 159.
laevis Wiegand. Millers Falls, Montague. *Rhodora*, Vol. XIV, p. 154.
oblongifolia (T. & G.) Roem. The extensive revision of this genus makes it doubtful if this species is in our range.
- Crataegus** L. Hawthorne. This genus has been extensively revised by Prof. C. S. Sargent in the last few years, and our region has not been thoroughly explored. Doubtless many other species exist here. Prof. Sargent has already enumerated some 60 species found in this state. The specific distinctions are so fine that none but a specialist can identify them.
- CRUS-GALLI** L.
punctata Jacq.
Gravesii Sarg. Amherst; *Rhodora*, Vol. V, p. 159.
coccinea L.
Stonei Sarg. Smith Hill, Pelham, etc.; *Rhodora*, Vol. V, p. 62.
tomentosa L.
rotundifolia Muench.
macrosperma Ashe. Springfield, L. Andrews.
polita Sarg. Springfield, L. Andrews.
macracantha Lodd.
- Fragaria** [Tourn.] L. Strawberry.
virginiana Duchesne.
vesca L. var. *americana* Porter. Mt. Holyoke, Mt. Toby, etc.
- Waldsteinia** Willd.
fragarioides (Michx.) Trattinick. Barren Strawberry. Apparently rare. See E. F. Williams in *Rhodora*, Vol. XII, p. 170.
- Potentilla** L. Cinquefoil. Five-finger.
arguta Pursh.
monspeliensis L. var. *novegica* (L.) Rydb.
argentea L. Silvery Cinquefoil.
- RECTA** L. Belchertown, R. E. Torrey; South Amherst, S. C. Brooks; Springfield, Dr. W. H. Chapin.
- palustris* (L.) Scop. Marsh Cinquefoil. Springfield, S. Stebbins.
- fruticosa* L. Shrubby Cinquefoil. More common in the Berkshires, where it becomes a noxious weed.
- tridentata* Ait. Three-toothed Cinquefoil. Hoosac Mountain, E. Hitchcock. Probably within our range.
- pumila* Poir. Springfield, L. Andrews.
- canadensis* L.
canadensis L. var. *simplex* (Michx.) T. & G. Springfield, L. Andrews.

Geum L. Avens.

canadense Jacq.

flavum (Porter) Bicknell. Herb. Spfld Sci. Museum.

virginianum L.

strictum Ait.

rivale L. Water or Purple Avens.

Rubus [Tourn.] L. Bramble.

idaeus L. var. *aculeatissimus* [C. A. Mey.] Regel & Tiling. Wild Red Raspberry. This common raspberry should be called *Rubus idaeus* L. var. *canadensis* Rich. (See W. H. Blanchard in *Rhodora*, Vol. XI, p. 236.)

occidentalis L. Black Raspberry. Thimbleberry.

odoratus L. Purple Flowering Raspberry.

triflorus Richards. Dwarf Raspberry. This plant should be called *Rubus pubescens* Raf. (See W. H. Blanchard in *Rhodora*, Vol. XI, p. 236.)

allegheniensis Porter. Springfield, L. Andrews.

frondosus Bigel. Springfield, A. Andrews.

Randii (Bailey) Rydb. Springfield, L. Andrews.

canadensis L.

Millspaughii Britton. Common in highlands of New England. Ezra Brainerd in *Rhodora*, Vol. II, p. 26. Collected at Hawley, elevation about 1800 ft.

Andrewsianus Blanchard. Southwick. In *Rhodora*, Vol. VIII, p. 17.

nigricans Rydb. Herb. Spfld Sci. Museum.

hispidus L.

villosus Ait. Dewberry.

villosus Ait. var. *humifusus* T. & G. Herb. Spfld Sci. Museum.

plicatifolius Blanchard. Palmer and Munson. In *Rhodora*, Vol. VIII, p. 216.

Rossbergianus Blanchard. Palmer. Blanchard in *Rhodora*, Vol. IX, p. 7.

Dalibarda Kalm.

repens L. Greenfield, E. Tuckerman; Sunderland, Lake Wyola, R. E. Torrey; Warwick, Dr. N. A. Cobb.

Agrimonia [Tourn.] L. Agrimony.

gryposepala Wallr.

striata Michx. Herb. Spfld Sci. Museum.

mollis (T. & G.) Britton. Herb. Spfld Sci. Museum.

Sanguisorba [Rupp.] L. Burnet.

canadensis L. Canadian Burnet. Hadley, Sunderland, Amherst, Deerfield, etc.

Rosa [Tourn.] L. Rose.

blanda Ait. Mt. Holyoke.

CINNAMOMEA L. Cinnamon Rose. Persistent about dwellings.

RUBIGINOSA L. Sweetbrier. Eglantine.

GALLICA L. Garden Rose. Roadsides and fields.

nitida Willd. Springfield, L. Andrews.

carolina L.

virginiana Mill.

humilis Marsh. Plumtrees Swamp, A. V. Osmun; Springfield,
L. Andrews.

multiflora Thunb. Escaping locally.

Prunus [Tourn.] L. Plum, Cherry, etc.

serotina Ehrh. Wild Black or Rum Cherry.

virginiana L. Choke Cherry.

pennsylvanica L. f. Wild Red, Bird, Fire or Pin Cherry.

institia C. Bullace Plum. Herb. Spfld Sci. Museum.

cuneata Raf. Springfield, L. Andrews.

pumila L. Sand Cherry.

americana Marsh. Wild Plum.

LEGUMINOSAE

Gleditsia L. Honey Locust.

TRIACANTHOS L. Honey Locust. Escaped from cultivation.

Cassia [Tourn.] L. Senna.

marilandica L. Wild Senna.

nictitans L. Wild Sensitive Plant.

Baptisia Vent. False Indigo.

tinctoria (L.) R. Br. Wild Indigo.

Crotaria (Dill.) L. Rattle-box.

sagittalis L.

Lupinus [Tourn.] L. Lupine.

perennis L.

Trifolium [Tourn.] L. Clover. Trefoil.

ARVENSE L. Rabbit-foot. Stone Clover.

incarnatum L. Crimson or Italian Clover. Amherst. Occa-
sionally persists.

PRATENSE L. Red Clover.

REPENS L. White Clover.

HYBRIDUM L. Alsike Clover. Common under cultivation and in
fields.

AGRARIUM L. Yellow or Hop Clover.

PROCUMBENS L. Low Hop Clover.

Melilotus [Tourn.] Hill. Melilot. Sweet Clover.

officinalis (L.) Lam. Yellow Melilotus.

ALBA Desr. White Melilot.

Medicago [Tourn.] L. Medick.

SATIVA L. Lucerne. Alfalfa.

LUPULINA L. Black Medick. Nonesuch. Both species of **Medicago** were formerly rare, but now more common.

Lotus [Tourn.] L. Bird's Foot Trefoil.

corniculatus L. North Amherst, A. V. Osmun.

Amorpha L.

FRUTICOSA L. False Indigo. Escaped from cultivation and established near Mass. Agr. College grounds, Amherst; Springfield, L. Andrews.

Tephrosia Pers. Hoary Pea.

virginiana (L.) Pers. Goat's Rue. Catgut.

Robinia L. Locust.

PSEUDO-ACACIA L. Common Locust or False Acacia. Wellesley.

VISCOSA Vent. Clammy Locust. Persistent and spreading.

Coronilla L.

VARIA L. Amherst, etc.

Desmodium Desv. Tick Trefoil.

nudiflorum (L.) DC.

grandiflorum (Walt.) DC.

rotundifolium (Michx.) DC.

canescens (L.) DC.

bracteosum (Michx.) DC.

Dillenii Darlingt.

paniculatum (L.) DC.

canadense (L.) DC.

rigidum (Ell.) DC.

marilandicum (L.) DC.

Lespedeza Michx. Bush Clover.

procumbens Michx.

violacea (L.) Pers.

hirta (L.) Hornem.

capitata Michx.

capitata Michx. var. *velutina* (Bicknell) Fernald. Springfield, L. Andrews.

Vicia [Tourn.] L. Vetch. Tare.

SATIVA L. Spring Vetch.

ANGUSTIFOLIA (L.) Reichard. var. *segetalis* (Thuillier) Koch. Amherst; Springfield, L. Andrews.

- Cracca* L. Deerfield ; Springfield, L. Andrews ; Sunderland, H. G. Jesup ; Monson, E. L. Morris ; Lock's pond, Shutesbury, R. E. Torrey. More or less common now ; previously rare. Probably native.
- Lathyrus* [Tourn.] L. Vetchling. Everlasting Pea.
LATIFOLIUS L. Everlasting or Perennial Pea. Amherst, etc.
PRATENSIS L. West Springfield, A. P. Foster ; Springfield, Mrs. M. L. Owen.
- Apios* (Boerhaave) Ludwig. Groundnut. Wild Bean.
tuberosa Muench.
- Amphicarpa* Ell. Hog Peanut.
monoica (L.) Ell.
Pitcheri T. & G. Sunderland, R. E. Torrey.

LINACEAE

- Linum* [Tourn.] L. Flax.
usitatissimum L. Dumps and railroad embankments.
virginianum L.

OXALIDACEAE

- Oxalis* L. Wood Sorrel.
Acetosella L. Common Wood Sorrel. Amherst, Conway, etc.
violacea L. Violet Wood Sorrel. Notch, Mt. Holyoke, etc.
stricta L.
corniculata L. Lady's Sorrel.
repens Thunb. About greenhouses, etc.

GERANIACEAE

- Geranium* [Tourn.] L. Cranesbill.
maculatum L. Wild Cranesbill.
Robertianum L. Herb Robert.
carolinianum L.
pusillum Burm. f. In grass lands. Springfield, Mrs. M. L. Owen.
molle L. In grass lands. Springfield, Mrs. M. L. Owen.

RUTACEAE

- Zanthoxylum* L. Prickly Ash.
americanum Mill. Northern Prickly Ash. Toothache-tree. Sunderland, E. Hitchcock ; Norwottuck, W. S. Clark.
- Ptelea* L. Hop Tree.
TRIFOLIATA L. Springfield, L. Andrews ; Easthampton, Dr. N. A. Cobb ; also seeding in freely where cultivated.

SIMARUBACEAE

Ailanthus Desf. Tree of Heaven.

GLANDULOSA Desf. Established here and there, frequently under the most adverse conditions.

POLYGALACEAE

Polygala [Tourn.] L. Milkwort.

paucifolia Willd. Fringed Polygala. Flowering Wintergreen.

polygama Walt.

sanguinea L.

verticillata L.

verticillata L. var. *ambigua* (Nutt.) Wood. Springfield, Mrs. A. J. Smith.

EUPHORBIACEAE

Acalypha L. Three-seeded Mercury.

virginica L.

Euphorbia L. Spurge.

Preslii Guss.

hirsuta (Torr.) Wiegand. Springfield, L. Andrews.

maculata L. Milk Purslane.

Ipecacuanhae L. Enfield ; A. S. Pease in *Rhodora*, Vol. VI, p. 87.

CYPARISSIAS L. Cypress Spurge. Fruiting forms found in Greenfield ; Walter Dean in *Rhodora*, Vol. XIV, page 194.

CALLITRICHACEAE

Callitriche L. Water Starwort.

palustris L.

heterophylla Pursh. Near Mt. Warner ; H. L. Clark in *Rhodora*, Vol. I, p. 164 ; Springfield, L. Andrews.

ANACARDIACEAE

Rhus L. Sumac.

typhina L. Staghorn Sumac.

glabra L. Smooth Sumac.

copallina L. Dwarf Sumac.

Vernix L. Poison Sumac or Dogwood.

Toxicodendron L. Poison Ivy. Poison Oak.

AQUIFOLIACEAE

Ilex L.

verticillata (L.) Gray. Black Alder. Winterberry.

laevigata (Pursh.) Gray. Smooth Winterberry. Belchertown ponds, H. G. Jesup; Southwick; C. H. Bissell in *Rhodora*, Vol. XIII, p. 54.

Nemopanthus Raf. Mountain Holly.

mucronata (L.) Trel.

CELASTRACEAE

Celastrus L. Staff Tree. Shrubby Bitter-sweet.

scandens L. Waxwork. Climbing Bitter-sweet.

STAPHYLEACEAE

Staphylea L. Bladder Nut.

trifolia L. American Bladder Nut. Sunderland, brooks of Conn. river, C. S. Plumb; Mt. Toby, A. V. Osmun; Plumtrees, Sunderland, Mt. Holyoke, Deerfield, North Hadley.

ACERACEAE

Acer [Tourn.] L. Maple.

pennsylvanicum L. Striped Maple. Moosewood.

spicatum Lam. Mountain Maple.

saccharum Marsh. Sugar or Rock Maple.

saccharum Marsh. var. *nigrum* (Michx. f.) Britton. Black Sugar Maple. Many of our sugar maples in the Connecticut valley, if not identical with this variety, closely approach it in form, texture, color and pubescence of leaf and general habit.

saccharinum L. White or Silver Maple.

rubrum L. Red or Swamp Maple.

rubrum L. var. *tridens* Wood. Springfield, L. Andrews.

Negundo L. Box Elder. Western part of our range.

SAPINDACEAE

Aesculus L. Horse-chestnut.

HIPPOCASTANUM L. Common Horse-chestnut. Occasionally propagates by seeds.

BALSAMINACEAE

- Impatiens* (Rivinius) L. Balsam. Jewelweed.
pallida Nutt. Pale Touch-me-not.
biflora Walt. Spotted Touch-me-not.

RHAMNACEAE

- Rhamnus* [Tourn.] L. Buckthorn.
alnifolia L'Her. Deerfield, E. Hitchcock. Has not been found
 by other collectors.
 CATHARTICA L. Common Buckthorn.
Ceanothus L. Red-root.
americanus L. New Jersey Tea.
ovatus Desf. Springfield, W. E. Johnson.

VITACEAE

- Psedera* Neck. Virginia Creeper. Woodbine.
quinquefolia (L.) Greene.
quinquefolia (L.) Greene. var. *hirsuta* (Donn) Rehder. Amherst;
 A. Rehder in *Rhodora*, Vol. X, p. 26.
Ampelopsis
heterophylla Sieb. & Zucc. Escaping; Mass. Agr. College
 grounds. (See Bailey's *Cyc. of Am. Hort.*, Vol. I,
 p. 59.
Vitis [Tourn.] L. Grape.
labrusca L. Northern Fox Grape.
aestivalis Michx. Summer or Pigeon Grape.
cordifolia Michx. Frost or Chicken Grape.
ulpina L. River-bank or Frost Grape.

TILIACEAE

- Tilia* [Tourn.] L. Linden.
americana L. Basswood.

MALVACEAE

- Abutilon* [Tourn.] Mill. Indian Mallow.
Theophrasti Medic. Velvet Leaf.
Malva [Tourn.] L. Mallow.
 ROTUNDIFOLIA L. Common Mallow, Cheeses.
 SYLVESTRIS L. High Mallow.
 MOSCHATA L. Musk Mallow.
Hibiscus L. Rose Mallow.
 TRIONUM L. Flower-of-an-hour. Springfield, L. Andrews.

HYPERICACEAE

- Hypericum* [Tourn.] L. St. John's-wort.
Ascyron L. Great St. John's-wort.
 PERFORATUM L. Common St. John's-wort.
punctatum Lam.
ellipticum Hook.
mutilum L.
majus (Gray) Britton. Conway, H. G. Jesup; Springfield.
canadense L.
gentianoides (L.) BSP. Orange Grass. Pineweed.
virginicum L. Marsh St. John's-wort.

CISTACEAE

- Helianthemum* [Tourn.] Mill. Rockrose.
canadense (L.?) Michx. Frostweed.
Lechea (Kalm) L. Pinweed.
villosa Ell.
minor L.
intermedia Leggett. Springfield, L. Andrews.
maritima Leggett. var. *interior* Robinson. Training School grounds, Springfield, L. Andrews.
tenuifolia Michx. Southwick, S. Stebbins; Amherst, E. F. Bishop.

VIOLACEAE

This genus, *Viola*, has recently been extensively revised and many new species have been added. The tendency to hybridization renders the determination of species difficult.

- Viola* [Tourn.] L. Violet. Heart's-ease.
pedata L. Bird-foot Violet.
pedata L. var. *lineariloba* DC. Springfield, L. Andrews.
cucullata Ait.
latiuscula Greene.
papilionacea Pursh.
palmata L.
triloba Schwein. Springfield, L. Andrews.
sororia Willd.
septentrionalis Greene.
fimbriatula Sm.
sagittata Ait.
Selkirkii Pursh.
lanceolata L. Lance-leaved Violet.
primulifolia L. Primrose-leaved Violet.

- pallens* (Banks) Brainerd.
blanda Willd. Notch, Mt. Holyoke, and Mt. Toby.
renifolia Gray.
rotundifolia Michx. Round-leaved or Early Yellow Violet.
pubescens Ait. Downy Yellow Violet.
scabriuscula Schwein.
canadensis L. Canada Violet.
striata Ait. Amherst, E. Hitchcock; South Hadley, Mrs. C. S. Phelps.
conspersa Reichenb.
rostrata Pursh. Long-spurred Violet. Whately Glen and Rattlesnake Gutter.
 TRICOLOR L. Pansy. Heart's-ease.
 ARVENSIS Murr. Wild Pansy.

THYMELAEACEAE

- Dirca* L. Leatherwood. Moosewood.
palustris L. Wicopy.

ELAEAGNACEAE

- Elaeagnus* [Tourn.] L.
umbellata Thunbg. Escaping freely on Mass. Agr. College grounds. See Bailey's *Cyc. of Am. Hort.*, Vol. II, p. 524.

LYTHRACEAE

- Ammannia* [Houston] L.
 KOEHNEI Britton. Lombard Reservoir, Springfield, Dr. W. H. Chapin.
Decodon J. F. Gmel. Swamp Loosestrife.
virticillatus (L.) Ell. Water Willow. Belchertown, Sunderland, Springfield, etc.
Lythrum L. Loosestrife.
alatum Pursh. Sunderland, R. E. Torrey; Springfield, L. Andrews.
 SALICARIA L. Spiked Loosestrife. Wet places.
 VIRGATUM L.

MELASTOMACEAE

- Rhexia* L. Deer Grass. Meadow Beauty.
virginica L. Leverett, Shutesbury, H. G. Jesup; Warwick, C. S. Plumb; Sunderland, A. V. Osmun. Rather rare, but abundant locally.

ONAGRACEAE

- Ludvigia* L. False Loosestrife.
alternifolia L. Seedbox. Hadley, E. Tuckerman ; Springfield,
 Mrs. M. L. Owen.
polycarpa Short and Peter. East Longmeadow, Dr. W. H.
 Chapin.
palustris (L.) Ell. Water Purslane.
Epilobium L. Willow-herb.
angustifolium L. Great Willow-herb. Fire-weed.
molle Torr. Sunderland, Amherst.
densum Raf.
coloratum Muhl.
adenocaulon Haussk.
Oenothera L. Evening Primrose.
cruciata Nutt. Sunderland, Northampton, etc., S. C. Brooks.
muricata L. Amherst, S. C. Brooks.
biennis L. Common Evening Primrose.
grandiflora Ait. Pansy Park, Belchertown, L. W. Goodell ;
 Springfield. Escaped from cultivation.
pumila L.
fruticosa L. Sundrops. South Hadley, Mrs. C. S. Phelps.
Circaea [Tourn.] L. Enchanter's Nightshade.
lutetiana L.
alpina L.

HALORAGIDACEAE

- Myriophyllum* [Vaill.] L. Water Milfoil.
verticillatum L.
humile (Raf.) Morong. Hadley, H. G. Jesup ; Springfield, L.
 Andrews.
humile (Raf.) Morong. forma *capillaceum* (Torr.) Fernald. Herb.
 Spfld Sci. Museum.
tenellum Bigel.
Proserpinaca L. Mermaid-weed.
palustris L.

ARALIACEAE

- Aralia* [Tourn.] L.
racemosa L. Spikenard.
hispida Vent. Bristly Sarsaparilla. Wild Elder.
nudicaulis L. Wild Sarsaparilla.

Panax L. Ginseng.

quinquefolium L. Ginseng. Deerfield, Conway, Mt. Toby, Amherst, etc. The ginseng of commerce, collected and cultivated for its medicinal roots.

trifolium L. Dwarf Ginseng. Ground-nut.

UMBELLIFERAE

Sanicula [Tourn.] L. Sanicle. Black Snakeroot.

marilandica L.

gregaria Bicknell. Springfield, L. Andrews.

canadensis L.

Hydrocotyle [Tourn.] L. Water Pennywort.

americana L.

Osmorhiza Raf. Sweet Cicely.

Claytoni (Michx.) Clarke.

longistylis (Torr.) DC.

Conium L. Poison Hemlock.

MACULATUM L. A poisonous plant.

Cicuta L. Water Hemlock.

maculata L. Spotted Cowbane. Musquash Root. Beaver Poison.

bulbifera L.

Carum L. Caraway.

CARVI L. Caraway. Around old dwellings.

Berula Hoffm.

erecta (Huds.) Coville.

Sium [Tourn.] L. Water Parsnip.

cicutaefolium Shrank.

Cryptotaenia DC. Honewort.

canadensis (L.) DC.

Zizia Koch.

aurea (L.) Koch. Golden Alexanders.

Taenidia Drude.

integerrima (L.) Drude. Montague, J. L. Bennett; Dr. N. A. Cobb's List.

Thaspium Nutt. Meadow Parsnip.

aureum Nutt.

Pastinaca L. Parsnip.

SATIVA L.

Anethum [Tourn.] L. Dill.

graveolens L. Feeding Hills, Springfield. Herb. Spfld Sci. Museum.

Heracleum L. Cow Parsnip.

lanatum Michx.

Angelica L. Angelica.

atropurpurea L.

Daucus [Tourn.] L. Carrot.

CAROTA L. One of our worst biennial weeds.

CORNACEAE

Cornus [Tourn.] L. Cornel. Dogwood.

canadensis L. Dwarf Cornel. Bunchberry.

florida L. Flowering Dogwood.

circinata L'Her. Round-leaved Cornel or Dogwood. A beautiful species found largely in rich humus of mountainous regions.

Amomum Mill. Silky Cornel. Kinnikinnik.

stolonifera Michx. Red-ozier Dogwood.

paniculata L'Her.

alternifolia L. f.

Nyssa L. Tupelo. Pepperidge. Sour Gum.

sylvatica Marsh. Black Gum. Generally distributed, but not well known.

ERICACEAE

Clethra [Gronov.] L. White Alder.

alnifolia L. Sweet Pepperbush. Belchertown swamp, R. E. Torrey. This is the most western station known to us in Mass. Common near the coast. A valuable honey plant.

Chimaphila Pursh. Pipsissewa.

umbellata (L.) Nutt. Prince's Pine. Pipsissewa.

maculata (L.) Pursh. Spotted Wintergreen. Less common than the preceding.

Moneses Salisb. One-flowered Pyrola.

uniflora (L.) Gray. Williamsburg, H. G. Jesup; Mt. Toby, H. L. Clark in *Rhodora*, Vol. I, p. 165; North Leverett, R. E. Torrey; Amherst.

Pyrola [Tourn.] L. Wintergreen. Shin Leaf.

secunda L.

chlorantha Sw.

elliptica Nutt. Shin Leaf.

americana Sweet.

asarifolia Michx.

Monotropa L. Pinesap.

uniflora L. Indian Pipe. Corpse Plant.

Hypopitys L. Pinesap. Fake Beech Drops.

Pterospora Nutt. Pine Drops.

andromeda Nutt. Easthampton, E. Hitchcock. Not observed by other collectors.

Ledum L. Labrador Tea.

groenlandicum Oeder. Amherst, Hitchcock Catal.; Greenfield, Plumtrees Road; Springfield, Miss F. A. Stebbins.

Rhododendron L.

viscosum (L.) Torr. Clammy Azalea. White Swamp Honeysuckle. Belchertown, etc. Rather rare and local. More common near the coast.

viscosum (L.) Torr. var. **glaucum** (Michx.) Gray. Springfield, L. Andrews.

nudiflorum (L.) Torr. Purple Azalea. Pinxter Flower.

canescens (Michx.) G. Don. This species seems to be more common than the preceding in the Conn. Valley. According to our observations a mark of distinction between the two is the simultaneous appearance of flowers and leaves in *R. canescens*.

canadense (L.) BSP. Rhodora.

Kalmia L. Laurel.

latifolia L. Mountain Laurel. Spoon-wood.

latifolia L. forma **polypetala** Nicholson. [See Alfred Rehder in *Rhodora*, Vol. XII, p. 1.] This interesting form of *Kalmia* was discovered by Miss M. Bryant at South Deerfield, and described by Asa Gray in the *Am. Nat.*, Vol. IV, p. 373; 1871. In this form the corolla is completely divided into linear or liliiform divisions. One of these forms is in the Arnold Arboretum, and Prof. C. S. Sargent has figured and described it in *Garden and Forest*, Vol. II, pp. 452-453. The writer discovered a similar form in Leverett near a roadside, in 1907. (See *Rhodora*, Vol. II, p. 199.) And in June, 1910, a large clump of the same was discovered at Mt. Toby.

angustifolia L. Sheep Laurel. Lambkill. Wicky.

polifolia Wang. Pale Laurel. Springfield, Dr. W. H. Chapin. Rare. Amherst.

Andromeda L.

glaucophylla Link. Bog Rosemary. Belchertown south pond, Hampton pond; Springfield, S. Stebbins and Dr. W. H. Chapin; Florence. See *Rhodora*, Vol. V, pp. 67-71.

Lyonia* Nutt.ligustrina* (L.) DC. Male Berry.***Chamaedaphne* Muench. Leather Leaf. Cassandra.***calyculata* (L.) Muench.***Epigaea* L. Ground Laurel. Trailing Arbutus.***repens* L. Mayflower.***Gaultheria* [Kalm] L. Aromatic Wintergreen.***procumbens* L. Teaberry. Checkerberry.***Arctostaphylos* Adans. Bearberry.***Uva-ursi* (L.) Spreng. Not common.***Calluna* Salisb. Heather. Ling.***vulgaris* (L.) Hull. Northfield, C. C. Frost. Probably an escape.***Chiogenes* Salisb. Creeping Snowberry.***hispidula* (L.) T. & G. Moxie Plum. Capillaire. Swamps, Springfield, Amherst, etc. Local.***Gaylussacia* HBK. Huckleberry.***frondosa* (L.) T. & G. Blue Tangle. Dangleberry.*baccata* (Wang.) C. Koch. Black Huckleberry.***Vaccinium* L. Blueberry. Cranberry.***stamineum* L. Deerberry. Squaw Huckleberry.*pennsylvanicum* Lam. Low Sweet Blueberry. Early Sweet Blueberry.*pennsylvanicum* Lam. forma *leucocarpum* Deane. The common blueberry runs into many forms, varying in color and translucency of the fruit. Forma *leucocarpum* with white fruit is most pronounced.*pennsylvanicum* Lam. var. *nigrum* Wood. Low Black Blueberry.*vacillans* Kalm. Late Low Blueberry.*corymbosum* L. High Blueberry.*atrococcum* (Gray) Heller. Black High Blueberry.*Oxycoccus* L. Small Cranberry.*macrocarpon* Ait. Large or American Cranberry.

PRIMULACEAE

Lysimachia* [Tourn.] L. Loosestrife.punctata* L. Roadsides, South Amherst, H. G. Jesup. Not found at this station now. See *Rhodora*, Vol. IV, p. 62.*quadrifolia* L.*terrestris* (L.) BSP.

NUMMULARIA L. Moneywort. Common.

thyrsiflora L. Tufted Loosestrife.***Steironema* Raf.***ciliatum* (L.) Raf.

Trientalis L. Chickweed. Wintergreen.

americana (Pers.) Pursh. Star Flower. This plant should be called *Trientalis borealis* Raf. See W. H. Blanchard in *Rhodora*, Vol. XI, p. 236.

OLEACEAE

Fraxinus [Tourn.] L. Ash.

americana L. White Ash. Our most common ash; the others more or less rare.

pennsylvanica Marsh. Red Ash.

pennsylvanica Marsh. var. *lanceolata* (Borkh.) Sarg. Green Ash.

nigra Marsh. Black Ash.

Ligustrum [Tourn.] L. Privet.

VULGARE L. Privet or Prim. Much more common near the coast.

GENTIANACEAE

Gentiana [Tourn.] L. Gentian.

crinita Froel. Fringed Gentian.

quinquefolia L. Mt. Toby, H. G. Jesup; Hoosac Mountain (probably within our range), E. Hitchcock; Blandford, Mrs. S. T. Seelye; Cobb's List.

Andrewsii Griseb. Closed Gentian.

linearis Froel. Hoosac Mts. (within our range), S. C. Brooks.

Halenia Borkh. Spurred Gentian.

deflexa (Sm.) Grisebach. Cummington, H. G. Jesup.

Bartonia Muhl.

virginica (L.) BSP.

Menyanthes [Tourn.] L. Buckbean.

trifoliata L.

Nymphoides [Tourn.] Hill. Floating Heart.

lacunosum (Vent.) Fernald. Ponds, South Hadley, Belchertown, etc., S. C. Brooks.

APOCYNACEAE

Apocynum [Tourn.] L. Dogbane. Indian Hemp.

androsaemifolium L. Spreading Dogbane.

medium Greene. Springfield, L. Andrews.

cannabinum L. Indian Hemp.

ASCLEPIADACEAE

- Asclepias** [Tourn.] L. Milkweed. Silkweed.
tuberosa L. Butterfly-weed. Pleurisy-root.
purpurascens L. Purple Milkweed.
incarnata L. Swamp Milkweed.
incarnata L. var. *pulchra* (Ehrh.) Pers. Springfield, L. Andrews.
cannabinum L. Indian Hemp.
syriaca L. Common Milkweed or Silkweed.
amplexicaulis Sm.
phytolaccoides Pursh. Poke Milkweed.
quadrifolia Jacq.
verticillata L.

CONVOLVULACEAE

- Ipomoea** L. Morning Glory.
purpurea (L.) Roth.
Convolvulus [Tourn.] L. Bindweed.
spithameus L.
 JAPONICUS Thunb. Escaped from cultivation.
sepium L. Hedge Bindweed.
Cuscuta [Tourn.] L. Dodder.
Epithymum Murr. Occasionally found parasitic on clover and alfalfa, causing "lodging" of the host plant. Introduced in clover seed, but not persisting.
arvensis Beyrich. Occasionally affecting alfalfa and clover.
Gronovii Willd. Common on alders, etc., but observed growing on raspberry bushes.

POLEMONIACEAE

- Phlox** L.
paniculata L. Persistent and occasionally escaped.
stolonifera Sims. Amherst, E. N. Brown.

HYDROPHYLLACEAE

- Hydrophyllum** [Tourn.] L. Waterleaf.
virginianum L. Rare.

BORAGINACEAE

- Cynoglossum** [Tourn.] L. Hound's Tongue.
 OFFICINALE L. Common Hound's Tongue.
boreale Fernald. Mt. Toby, A. V. Osmun.
- Lappula** [Rivinius] Muench. Stickseed.
virginiana (L.) Greene. Beggar's Lice. Springfield, L. Andrews ;
 Amherst.
- Symphytum** [Tourn.] L. Comfrey.
 OFFICINALE L. Common Comfrey. Waste places ; Belchertown,
 Leverett, etc.
- Lycopsis** L. Bugloss.
arvensis L. Small Bugloss. Amherst and Hatfield, E. Hitchcock.
- Myosotis** (Rupp.) L. Scorpion-grass. Forget-me-not.
 SCORPIOIDES L. True Forget-me-not. Amherst, etc.
arvensis (L.) Hill. Hitchcock Catal.
virginica (L.) BSP. Amherst, Mt. Holyoke, etc., H. G. Jesup.
- Lithospermum** [Tourn.] L. Gromwell. Puccoon.
 ARVENSE L. Corn Gromwell. Longmeadow ; Springfield, L. Andrews.
- Onosmodium** Michx. False Gromwell.
virginianum (L.) DC. Monson, E. Hitchcock ; Long Hill, Springfield, Mrs. Burnham.
- Echium** [Tourn.] L. Viper's Bugloss.
 VULGARE L. Blue-weed. Blue Devil. Roadsides near Greenfield, F. G. Tuckerman ; Springfield, Dr. George Demock ; Conway, H. G. Jesup.

VERBENACEAE

- Verbena** [Tourn.] L. Vervain.
urticaefolia L. White Vervain.
angustifolia Michx. South Hadley, E. Hitchcock ; Amherst, W. S. Clark ; Mt. Tom, S. Stebbins ; Mt. Holyoke, H. G. Jesup.
- hastata* L. Blue Vervain.

LABIATAE

- Teucrium** [Tourn.] L. Germander.
canadense L. American Germander. Wood Sage.
- Trichostema** L. Blue Curls.
dichotomum L. Bastard Pennyroyal.

- Scutellaria** L. Skullcap.
lateriflora L. Mad-dog Skullcap. A form with white flowers has been found at Sunderland by R. E. Torrey.
galericulata L.
- Marrubium** [Tourn.] L. Horehound.
 VULGARE L. Common Horehound.
- Agastache** Clayt. Giant Hyssop.
nepetoides (L.) Ktze. Deerfield, E. Hitchcock. Not since collected.
- Nepeta** L. Cat Mint.
 CATARIA L. Catnip.
 HEDERACEA (L.) Trevisan. Ground Ivy. Gill-over-the-Ground.
- Prunella** L. Self-heal.
vulgaris L. Heal-all. Carpenter-weed.
- Galeopsis** L. Hemp. Nettle.
 TETRAHIT L. Common Hemp. Nettle.
- Lamium** L. Dead Nettle.
 AMPLEXICAULE L. Henbit.
 PURPUREUM L.
- Leonurus** L. Motherwort.
 CARDIACA L. Common Motherwort.
- Stachys** [Tourn.] L. Hedge Nettle.
 TENUIFOLIA Willd. var. ASPERA (Michx.) Fernald.
- Monarda** L. Horse Mint.
 DIDYMA L. Oswego Tea. Bee Balm. Roadsides, Leverett, etc.
 FISTULOSA L. Wild Bergamot. Shelburne, F. G. Tuckerman; Mt. Toby, A. V. Osmun. Prof. Osmun observed a large colony of the species on Mt. Toby quite remote from any habitation, which had all the appearance of being indigenous. Prof. Tuckerman apparently considered it indigenous, although M. L. Fernald (*Rhodora*, Vol. III, p. 15) describes it as an escape in New England.
- Blephilia** Raf.
ciliata (L.) Raf. Hadley, H. G. Jesup.
hirsuta (Pursh) Benth. Wood Mint. Cummington, etc., E. Hitchcock.
- Hedeoma** Pers. Mock Pennyroyal.
pulegioides (L.) Pers. American Pennyroyal.
- Melissa** [Tourn.] L. Balm.
officinalis L. Common Balm. Escaped from gardens, Conway, H. G. Jesup.
- Satureja** [Tourn.] L. Savory. Calamint.
vulgaris (L.) Fritsch. Basil. Apparently native.

- Origanum** [Tourn.] L. Wild Marjoram.
 VULGARE L. Roadsides, Amherst, etc.
- Pycnanthemum** Michx. Mountain Mint. Basil.
flexuosum (Walt.) BSP.
virginianum (L.) Durand & Jackson.
incanum (L.) Michx. Mt. Holyoke, etc., H. G. Jesup.
muticum (Michx) Pers.
- Thymus** [Tourn.] L.
 SERPYLLUM L. Creeping Thyme. Amherst, etc., W. D. Barlow ; Springfield, Dr. W. H. Chapin. Spreading.
- Lycopus** [Tourn.] L. Water Horehound.
virginicus L. Bugle Weed.
uniflorus Michx. Bugle Weed. Springfield, L. Andrews.
americanus Muhl.
- Mentha** [Tourn.] L. Mint.
 SPICATA L. Spearmint.
piperita L. Peppermint.
arvensis L. var. *canadensis* (L.) Briquet.
arvensis L. var. *glabrata* (Benth.) Fernald. Sunderland, R. E. Torrey.
- Collinsonia** L. Horse Balm.
canadensis L. Rich-weed. Stone-root.

SOLANACEAE

- Solanum** [Tourn.] L. Nightshade.
 DULCAMARA L. Bitter-sweet.
nigrum L. Common Nightshade.
carolinense L. Horse Nettle. Training School grounds, Springfield.
- Physalis** L. Ground Cherry.
 PRUINOSA L. Strawberry Tomato. Persistent and escaping.
heterophylla Nees. Springfield, L. Andrews ; Amherst.
virginiana Mill. Springfield, Amherst, etc.
- Nicandra** Adans. Apple of Peru.
 PHYSALODES (L.) Pers.
- Lycium** L. Matrimony Vine.
halimifolium Mill. Sometimes escaped.
- Hyoscyamus** [Tourn.] L. Henbane.
 NIGER L. Black Henbane.
- Datura** L. Jamestown Weed or Jimson Weed. Thorn Apple.
 STRAMONIUM L. Stramonium.
 TATULA L. Purple Thorn Apple.

SCROPHULARIACEAE

Verbascum [Tourn.] L. Mullein.

THAPSUS L. Common Mullein.

BLATTARIA L. Moth Mullein. Roadsides, etc.

Linaria [Tourn.] Hill. Toadflax.

VULGARIS Hill. Ramsted. Butter and Eggs.

canadensis (L.) Dumont.

Scrophularia [Tourn.] L. Figwort.

marilandica L.

leporella Bicknell. Amherst, S. F. Hamblin ; Springfield, L. Andrews.

Pentstemon (Mitchell) Ait.

hirsutus (L.) Willd. Springfield, Miss G. L. Pettis ; East Amherst, H. L. Clark in *Rhodora*, Vol. I, p. 164 ; Hadley, Cobb's List.

LAEVIGATUS Ait. Springfield, Miss G. L. Pettis.

grandiflorus Nutt. Springfield, in waste land on the edge of the city, Dr. W. H. Chapin ; *Rhodora*, Vol. VII, p. 36. Springfield, Miss E. J. Steele and Joel Hendrick.

Chelone [Tourn.] L. Turtlehead. Snakehead.

glabra L. Balmony.

Mimulus L. Monkey Flower.

ringens L.

alatus Ait. Amherst, E. Hitchcock. Not observed in recent years.

Ilysanthes Raf. False Pimpernel.

dubia (L.) Barnhart.

Gratiola L. Hedge Hyssop.

virginiana L.

aurea Muhl.

Veronica [Tourn.] L. Speedwell.

virginica L. Culver's-root. Culver's Physic.

Anagallis-aquatica L. Water Speedwell.

americana Schwein. American Brooklime.

scutellata L. Marsh Speedwell.

officinalis L. Common Speedwell.

serpyllifolia L. Thyme-leaved Speedwell.

peregrina L. Neckweed. Purslane Speedwell.

ARVENSIS L. Corn Speedwell.

Gerardia (Plumier) L. Gerardia.

pedicularia L.

flava L. Downy False Foxglove.

virginica (L.) BSP. Smooth False Foxglove.

- G. paupercula* (Gray) Britton. Purple Gerardia. Generally distributed, but not common.
tenuifolia Vahl. Slender Gerardia.
Castilleja Mutis. Painted Cup.
coccinea (L.) Spreng. Scarlet Painted Cup. Generally distributed, but not common.
Melampyrum [Tourn.] L. Cow Wheat.
lineare Lam.
Pedicularis [Tourn.] L. Lousewort.
canadensis L. Common Lousewort. Wood Betony.
lanceolata Michx. Prescott, E. F. Bishop, H. G. Jesup; West Springfield, E. Hitchcock. See *Rhodora*, Vol. VII, p. 36.
Schwalbea [Gronov.] L. Chaff-seed.
americana L. Montague, H. G. Jesup. Possibly introduced.

LENTIBULARIACEAE

- Utricularia* L. Bladderwort.
inflata Walt. Belchertown ponds, etc.
vulgaris L. Greater Bladderwort.
minor L. Smaller Bladderwort. Leverett pond, etc.
gibba L. Leverett pond, E. F. Bishop; Springfield, Mrs. M. L. Owen; and elsewhere.
intermedia Hayne. Springfield, S. Stebbins; Leverett, Belchertown, etc.
purpurea Walt. Belchertown, E. F. Bishop; Springfield, Mrs. M. L. Owen; and elsewhere.
resupinata B. D. Greene. Belchertown, E. F. Bishop.
cornuta Michx.

OROBANCHACEAE

- Epifagus* Nutt. Beech-drops. Cancer-root.
virginiana (L.) Bart.
Conopholis Wallr. Squaw-root. Cancer-root.
americana (L. f.) Wallr. Mt. Holyoke, E. Hitchcock; Mt. Tom, S. Stebbins; Mt. Toby, H. L. Clark in *Rhodora*, Vol. I, p. 165.
Orobanche [Tourn.] L. Broom-rape.
uniflora L. One-flowered Cancer-root.

PHRYMACEAE

- Phryma* L. Lopseed.
Leptostachya L.

PLANTAGINACEAE

Plantago [Tourn.] L. Plantain. Ribwort.

major L. Common Plantain. The old Indian name was "White Man's Foot," applied because of its appearance in clearings made by the early settlers. It was formerly considered as an introduced plant, but is now recognized as native to America; it is also cosmopolitan.

Rugelii Dcne. Very common.

LANCEOLATA L. Rib Grass. Ripple Grass. English Plantain. South Amherst, 1829, E. Hitchcock. Then apparently rare; now very common.

MEDIA L. Hoary Plantain. Becoming common.

Purshii R. & S. Springfield, 1879; Amherst, H. L. Clark in *Rhodora*, Vol. I, p. 165. Adventive from the West.

ARISTATA Michx. Near Pratt Field, Amherst, S. C. Brooks; Springfield, L. Andrews.

RUBIACEAE

Asperula L.

galioides Bieb. Northampton, Miss G. L. Pettis.

odorata L. Sweet Woodruff. Northampton, Miss G. L. Pettis.
See Bailey's *Enc. of Am. Hort.*, p. 108.

Galium L. Bedstraw. Cleavers.

Aparine L. Cleavers. Goose Grass. Hitchcock Catal.

VERUM L. Yellow Bedstraw. Springfield, Amherst, etc.

pilosum Ait.

circaezans Michx. Wild Liquorice.

lanceolatum Torr. Wild Liquorice.

boreale L. Northern Bedstraw.

MOLLUGO L.

trifidum L.

Claytoni Michx. Springfield, L. Andrews.

tinctorium L.

asprellum Michx. Rough Bedstraw.

triflorum Michx. Sweet-scented Bedstraw.

Mitchella L. Partridge Berry.

repens L.

Cephalanthus L. Buttonbush.

occidentalis L.

Houstonia L.

caerulea L. Bluets. Innocence.

longifolia Gaertn. Springfield.

CAPRIFOLIACEAE

Diervilla [Tourn.] Mill. Bush Honeysuckle.

Lonicera Mill.

Lonicera L. Honeysuckle.

caerulea L. var. **villosa** (Michx.) T. & G. Mountain Fly Honeysuckle. Springfield, Dr. W. H. Chapin. Mt. Holyoke, Dr. H. E. Hooker.

tatarica L. Tartarian Honeysuckle. Amherst; escaped from cultivation.

canadensis Marsh. American Fly Honeysuckle.

sempervirens L. Trumpet Honeysuckle. Sparingly spontaneous.

dioica L.

Symphoricarpos [Dill.] Ludwig. Snowberry.

racemosus Michx. Snowberry. Amherst, escaped from cultivation.

Linnaea [Gronov.] L. Twin-flower.

borealis L. var. **americana** (Forbes) Rehder.

Triosteum L. Feverwort. Horse Gentian.

perfoliatum L. Tinker's Weed. Wild Coffee.

aurantiacum Bicknell. North Wilbraham; Herb. Spfld Sci. Museum.

Viburnum [Tourn.] L. Arrow-wood. Laurestinus.

alnifolium Marsh. Hobble-bush. Witch Hobble. Moosewood. Confined to rich humus soils.

Opulus L. var. **americanum** (Mill.) Ait. Cranberry-tree. High-bush Cranberry. Pimbina.

acerifolium L. Dockmackie. Arrow-wood.

dentatum L. Arrow-wood.

cassinoides L. Withe Rod. Wild Raisin.

Lentago L. Sweet Viburnum. Sheepberry. Nannyberry. Wild Raisin.

Sambucus [Tourn.] L. Elder.

canadensis L. Common Elder.

racemosa L. Red-berried Elder.

VALERIANACEAE

Valeriana [Tourn.] L. Valerian.

officinalis L. Garden Heliotrope. Slightly escaped from gardens.

Valerianella [Tourn.] Hill. Corn Salad. Lamb's Lettuce.

radiata (L.) Dufr. Herb. Spfld Sci. Museum; Springfield railroads, Miss Eaton, 1892. Doubtfully native in this vicinity.

radiata (L.) Dufr. var. **leiocarpa** (T. & G.) Krok. Springfield, C. B. Graves in *Rhodora*, Vol. IV, p. 195.

DIPSACACEAE

- Dipsacus* [Tourn.] L. Teasel.
sylvestris Huds. Wild Teasel. Cobb's List.

CUCURBITACEAE

- Sicyos* L. One-seeded Bur Cucumber.
angulatus L.
Echinocystis T. & G. Wild Balsam-apple.
lobata (Michx.) T. & G.

CAMPANULACEAE

- Specularia* (Heist.) Fabricius. Venus's Looking-glass.
perfoliata (L.) A. DC.
Campanula [Tourn.] L. Bellflower.
rotundifolia L. Harebell. Bluebell.
aparinoides Pursh. Marsh Bluebell.

LOBELIACEAE

- Lobelia* [Plumier] L.
cardinalis L. Cardinal-flower.
 SIPHILITICA L. Great Lobelia. Occasional.
spicata Lam.
Kalmii L. South Hadley, E. Hitchcock ; Greenfield, F. G. Tuckerman ; Turner's Falls, C. S. Plumb ; Amherst, W. D. Barlow.
inflata L. Indian Tobacco.
Dortmanna L. Water Lobelia.

COMPOSITAE

- Vernonia* Schreb. Ironweed.
noveboracensis Willd. West Springfield, E. Hitchcock.
Eupatorium [Tourn.] L. Thoroughwort.
purpureum L. Joe-Pye Weed. Trumpet Weed.
purpureum L. var. *maculatum* (L.) Darl. Springfield, etc., L. Andrews.
verbernaefolium Michx.
sessilifolium L. Upland Boneset. Notch, Mt. Holyoke, H. G. Jesup.
perfoliatum L. Thoroughwort. Boneset.
urticaefolium Reichard. White Snakeroot.
Mikania Willd. Climbing Hemp-weed.
scandens (L.) Willd.
Liatris Schreb.
scariosa Willd.

Solidago L. Golden-rod.

squarrosa Muhl. Mt. Holyoke, Mt. Toby; Agawam, L. A.
Marsh; Shutesbury, Sunderland, C. S. Plumb.

caesia L.

caesia L. var. *axillaris* (Pursh.) Gray. Cobb's List.

latifolia L.

bicolor L.

puberula Nutt. Pelham, H. G. Jesup; South Hadley, Mrs. C. S.
Phelps; Amherst.

uliginosa Nutt.

speciosa Nutt.

patula Muhl.

arguta Ait. Mt. Holyoke; Leverett, H. G. Jesup.

junceae Ait.

neglecta T. & G.

odora Ait. Sweet Golden-rod.

ulmifolia Muhl.

rugosa Mill.

nemoralis Ait.

canadensis L.

altissima L.

serotina Ait.

serotina Ait. and var. *gigantea* (Ait.) Gray.

rigida L. South Hadley, E. Hitchcock; also see Hoffmann in
Rhodora, Vol. VI, p. 206.

graminifolia (L.) Salisb.

tenuifolia Pursh. Springfield, L. Andrews.

Aster [Tourn.] L. Starwort. Aster. Frost-flower.

divaricatus L.

Schreberi Nees. Springfield, L. Andrews.

macrophyllus L.

novae-angliae L.

patens Ait.

undulatus L.

cordifolius L.

laevis L.

ericoides L.

amethystinus Nutt. Hadley, E. Tuckerman, H. G. Jesup. Lev-
erett, C. S. Plumb.

multiflorus Ait.

dumosus L.

lateriflorus (L.) Britton.

Tradescanti L.

paniculatus Lam.

- A. salicifolius** Ait.
longifolius Lam.
novi-belgii L. Springfield, L. Andrews.
puniceus L.
puniceus L. var. *demissus* Lind. Northampton, R. Cameron ;
M. L. Fernald in *Rhodora*, Vol. I, p. 190.
puniceus L. var. *compactus* Fernald. Northampton, R. Cam-
eron ; M. L. Fernald in *Rhodora*, Vol. I, p. 189.
puniceus L. var. *firmus* (Nees) T. & G. Springfield, L. An-
drews.
umbellatus Mill.
linariifolius L.
ptarmicoides T. & G. South Hadley Falls ; Herb. Mt. Holyoke
College.
acuminatus Michx.
tenuifolius L.
- Erigeron** L. Fleabane.
pulchellus Michx. Robin's Plantain.
philadelphicus L.
annuus (L.) Pers. Daisy Fleabane. Sweet Scabious.
ramosus (Walt.) BSP. Daisy Fleabane.
ramosus (Walt.) BSP. var. *discoideus* (Robbins) BSP.
canadensis L. Horse-weed. Butter-weed.
- Sericocarpus** Nees. White-topped Aster.
asteroides (L.) BSP.
linifolius (L.) BSP.
- Antennaria** Gaertn. Everlasting. Ladies' Tobacco.
Parlinii Fernald. Mt. Holyoke (Notch) ; Mt. Toby, A. V. Osmun.
canadensis Greene. Springfield, L. Andrews.
plantaginifolia (L.) Richards. Plantain-leaved Everlasting.
fallax Greene. Springfield, L. Andrews.
neodioica Greene. Springfield, L. Andrews.
neglecta Greene. Springfield, L. Andrews.
- Anaphalis** DC. Everlasting.
margaritacea (L.) Benth. & Hook. Pearly Everlasting.
- Gnaphalium** L. Cudweed.
polycephalum Michx. Common Everlasting.
decurrens Ives. Everlasting.
uliginosum L. Low Cudweed.
- Inula** L. Elecampane.
HELENIUM L. Elecampane.
- Ambrosia** [Tourn.] L. Ragweed.
trifida L. Great Ragweed.

- A. trifida** L. var. *integrifolia* (Muhl.) T. & G. Springfield, L. Andrews.
artemisiifolia L. Roman Wormwood. Hog-weed. Bitter-weed.
- Xanthium** [Tourn.] L. Cocklebur. Clotbur.
SPINOSUM L. Plainfield, Porter.
STRUMARIUM L. See Britton & Brown's *Ill. Flora of N. A.*, Vol. III, p. 298.
ECHINATUM Murr. Springfield, L. Andrews.
- Heliopsis** Pers. Ox-eye.
scabra Dunal. Springfield, L. Andrews.
- Rudbeckia** L. Cone-flower.
triloba L. Springfield, L. Andrews.
HIRTA L. Yellow Daisy. Black-eyed Susan. Nigger-head.
laciniata L.
- Helianthus** L. Sunflower.
annuus L. Common Sunflower. Frequently spontaneous.
scaberrimus Ell. Springfield, L. Andrews.
giganteus L.
divaricatus L.
strumosus L.
decapetalus L.
TUBEROSUS L. Jerusalem Artichoke. Northampton meadows ; Northfield meadows.
- Coreopsis** L. Tickseed.
TINCTORIA Nutt. Roadsides.
- Bidens** L. Bur Marigold.
frondosa L. Common Beggar-ticks. Stick-tight.
connata Muhl.
cernua L. Stick-tight.
laevis (L.) BSP.
Beckii Torr. Water Marigold. Agawam river, Mrs. M. L. Owen.
- Galinsoga** R. & P.
parviflora Cav. Springfield, Dr. W. H. Chapin, 1888. Since found elsewhere occasionally.
- Helenium** L. Sneezeweed.
nudiflorum Nutt. S. C. Brooks, 1910.
autumnale L. Springfield, L. Andrews.
- Achillea** (Vaill.) L. Yarrow.
Millefolium L. Common Yarrow. Milfoil.
- Anthemis** (Mich.) L. Chamomile.
COTULA L. May-weed. Dog Fennel.
ARVENSIS L. Corn Chamomile. Amherst, in grain fields.
- Chrysanthemum** [Tourn.] L. Ox-eye Daisy.
LEUCANTHEMUM L. Ox-eye or White Daisy. Marguerite.
 White-weed. One of our worst weeds in mowings.

C. segetum L. Corn Chrysanthemum. Corn Marigold. Pansy Park, Belchertown, L. W. Goodell. Escaped from cultivation.

Parthenium (L.) Bernh. Feverfew. Springfield, L. Andrews.

Balsamita L. var. *tanacetoides* Boiss. Costmary. Mint Geranium. Roadsides, rare, E. Tuckerman.

Tanacetum L. Tansy.

VULGARE L. Common Tansy.

VULGARE L. var. *CRISPUM* DC. Occasional.

Artemisia L. Wormwood.

caudata Michx. Springfield, L. Andrews.

canadensis Michx. Mt. Sugarloaf, Sunderland.

VULGARIS L. Common Mugwort.

BIENNIS Willd. Springfield, L. Andrews.

Tussilago [Tourn.] L. Coltsfoot.

FARFARA L. Amherst, Pelham, Granville, Springfield, Dr. W. H. Chapin. One of our earliest introduced plants, but still rare.

Petasites [Tourn.] Hill. Sweet Coltsfoot.

palmaris (Ait.) Gray. Sunderland, E. Hitchcock; Amherst (1911), R. E. Torrey. Probably Dr. Hitchcock's original station was Plumtrees, Sunderland, where it has existed for many years and is still found. For a number of years it did not appear here, but it has recently come in again.

Erechtites Raf. Fireweed.

hieracifolia (L.) Raf.

Senecio [Tourn.] L. Groundsel. Ragwort. Squaw-weed.

VULGARIS L. Common Groundsel.

obovatus Muhl.

aureus L. Golden Ragwort.

Balsamitae Muhl.

Arctium L. Burdock.

LAPPA L. Great Burdock.

MINUS Bernh. Common Burdock. Springfield, L. Andrews.

NEMEROSUM Lejeune & Courtois. Springfield, L. Andrews. See M. L. Fernald and K. M. Wiegand in *Rhodora*, Vol. XII, p. 45.

Cirsium [Tourn.] Hill.

lanceolatum (L.) Hill. Common or Bull Thistle.

discolor (Muhl.) Spreng.

altissimum (L.) Spreng.

muticum Michx. Swamp Thistle.

pumilum (Nutt.) Spreng. Pasture or Bull Thistle.

ARVENSE (L.) Scop. Canada Thistle.

Onopordum (Vaill.) L. Cotton or Scotch Thistle.

ACANTHIUM L. Amherst, H. L. Clark in *Rhodora*, Vol. I, p. 164.

Centaurea L. Star Thistle.

Cyanus L. Bachelor's Button.

NIGRA L. Knapweed. Spanish Buttons. Waste places, Hardwick, E. Hitchcock; Amherst, etc.

Cichorium [Tourn.] L. Succory or Chicory.

INTYBUS L. Common Chicory. Blue Sailors. Formerly rare (1875), now quite common.

Krigia Schreb. Dwarf Dandelion.

virginica (L.) Willd.

amplexicaulis Nutt. Cynthia.

Leontodon L. Hawkbit.

AUTUMNALIS L. Fall Dandelion. "Arnica." One station noted in 1875; now rather common in some localities.

Picris L.

hieracoides L. Springfield, waste places, Mrs. M. L. Owen.

echioides L. Ox-tongue. Forest Park, Springfield, several plants noted in 1894, Mrs. M. L. Owen.

Tragopogon [Tourn.] L. Goat's Beard.

porrifolius L. Salsify. Oyster-plant. Huntington, escaped from cultivation.

pratensis L. Huntington, Northampton, escaped from cultivation.

Taraxacum [Haller] Ludwig. Dandelion.

OFFICINALE Weber. Troublesome on lawns. For many years what is known as the French dandelion has been cultivated on the Mass. Agr. College grounds, and has escaped very freely into nearby fields. It presents very different characteristics from the type even when escaped, and is susceptible to a mildew (*Podosphaera*), differing in this respect from the type.

officinale Weber. var. *palustre* (Sm.) Blytt. Springfield, L. Andrews.

ERYTHROSPERMUM Andr. Red-seeded Dandelion. Mass. Agr. College grounds.

Sonchus [Tourn.] L. Sow Thistle.

ARVENSIS L. Field Sow Thistle.

OLERACEUS L. Common Sow Thistle.

ASPER (L.) Hill. Spring-leaved Sow Thistle.

Lactuca [Tourn.] L. Lettuce.

SCARIOLA L. Prickly Lettuce. Springfield, L. Andrews.

SCARIOLA L. var. *INTEGRATA* Gren. & Godr. Springfield, L. Andrews.

- L. canadensis* L. Wild Lettuce. Horse-weed. Springfield, L. Andrews.
integrifolia Bigel.
hirsuta Muhl. Amherst, H. G. Jesup.
spicata (Lam.) Hitchc.
Crepis L. Hawk's Beard.
capillaris (L.) Wallr. Springfield, L. Andrews.
Prenanthes (Vaill.) L. Rattlesnake-root.
alba L. White Lettuce. Rattlesnake-root.
trifoliata (Cass.) Fernald. Gall-of-the-earth.
altissima L.
Hieracium [Tourn.] L. Hawkweed.
AURANTIACUM L. Orange Hawkweed. Devil's Paint-brush.
 Formerly cultivated in gardens, and for the past 15 years a noxious weed in hay fields and on higher elevations, especially in Worcester and Berkshire counties.
venosum L. Rattlesnake-weed. Poor Robin's Plantain.
paniculatum L.
marianum Willd. Dry Hill, Montague, R. E. Torrey.
scabrum Michx.
Gronovii L.
MURORUM L. Golden Lungwort. Established in open woods. Northampton, Mrs. E. H. Terry; *Rhodora*, Vol. VII, p. 80.
canadense Michx.

Index to Genera and Common Names.

	Page		Page		Page		Page
A		Aquilegia	30	Beech-drops	56	Brake	1
Abies	5	Arabis	32	Beggar's Lice	52	Bramble	36
Abutilon	42	Aralia	45	Belamcanda	19	Brasenia	29
Acalypha	40	Arceuthobium	24	Bellflower	57	Brassica	32
Acer	41	Arctium	63	Bellwort	19	Bristly Crowfoot	29
Achillia	62	Arctostaphylos	49	Bent Grass	9	Foxtail Grass	8
Acorus	16	Arenaria	27	Benzoïn	31	Sarsaparilla	45
Actaea	30	Arethusa	20	Berberis	30	Briza	10
Adder's Mouth	21	Arisaema	16	Bermuda Grass	10	Brome Grass	11
Tongue	2	Aristida	8	Berteroa	31	Bromus	11
Adiantum	1	Aristolochia	24	Berula	46	Broom-rape	56
Adlumia	31	Aromatic Winter-		Betula	23	Buckbean	50
Aesculus	41	green	49	Bidens	62	Buckthorn	42
Agastache	53	Arrhenatherum	10	Bindweed	51	Buckwheat	26
Agrimonia	36	Arrow Arum	16	Bird-foot Violet	43	Buffalo Currant	31
Agropyron	11	Arrow-head	7	Bird's Foot Tre-		Bugbane	34
Agrostemma	28	Arrow-leaved		foil	38	Bugle Weed	54
Agrostis	9	Tear-thumb	25	Birthwort	24	Bugloss	52
Ailanthus	40	Arrow-wood	58	Bitter Cress	32	Bulbous Butter-	
Alder	23	Artemisia	63	Dock	25	cup	29
Alettris	18	Asarum	24	Nut	22	Bullace Plum	37
Alfalfa	38	Asclepias	51	Bitter-sweet	54	Bulrush	12
Alisma	7	Ash	50	Black Alder	41	Burdock	63
Allium	17	Asparagus	18	Ash	50	Bur Marigold	62
Alnus	23	Asperula	57	Bindweed	25	Bur-reed	6
Alopecurus	9	Aspidium	1	Gum	47	Bush Clover	38
Alsike Clover	37	Asplenium	1	Henbane	54	Honeysuckle	58
Alyssum	ii, 31	Aster	60	High Blueberry	49	Buttercup	29
Amaranth	26	Avena	10	Huckleberry	49	Butterfly-weed	51
Amaranthus	ii, 26	Avens	36	Medick	38	Butternut	22
Ambrosia	61	Awned Wheat		Mustard	32	Buttonbush	57
Amelanchier	34	Grass	11	Poplar	22		
American Aspen	22			Snakeroot	30		
Bladder Nut	41	B		Spruce	5	C	
Brooklime	55	Bachelor's But'n	64	Sugar Maple	41	Calamagrostis	9
Elm	24	Bald Rush	12	Walnut	21	Calingale	11
Fly Honey-		Balm	53	Willow	22	Calla	16
suckle	58	Balm of Gilead	22	Blackberry Lily	19	Callitriche	40
Germander	52	Balmoney	55	Bladder Cam-		Calluna	49
Mountain Ash	34	Balsam	42	pion	28	Calopogon	20
Pennyroyal	53	Fir	5	Fern	21	Caltha	30
Wh. Hellebore	17	Poplar	22	Nut	41	Camelina	51
Yew	5	Baneberry	30	Bladderwort	56	Campanula	39
Ammania	44	Baptisia	37	Blephilia	53	Campion	28
Amorpha	38	Barbarea	32	Blood Root	31	Camposorus	1
Ampelopsis	42	Barberry	8	Blueberry	49	Canada Blue	
Amphicarpa	39	Barnyard Grass	30	Blue Cohosh	30	Grass	10
Anaphalis	61	Barren Strawberry	35	Curls	52	Thistle	63
Andromeda	48	Bartonia	50	Tangle	49	Violet	46
Andropogon	7	Basil	53	Vervain	52	Canadi'n Burnet	36
Anemone	29	Basswood	42	Blue-eyed Grass	19	Canary Grass	8
Anemoneella	29	Bastard Penny-		Blue-joint Grass	9	Cannabis	24
Anethum	36	royal	52	Blue-weed	52	Capsella	31
Angelica	47	Toad-flax	24	Blues	57	Caraway	46
Antennaria	61	Bayberry	22	Boehmeria	24	Cardamine	52
Anthemis	62	Beak Rush	13	Bog Rosemary	48	Cardinal-flower	39
Anthoxanthum	8	Beaked Hazeln't	23	Rush	17	Carex	13, 14, 15
Anychia	27	Bearberry	49	Botrychium	2	Carpet Weed	27
Apios	39	Beard Grass	7	Bottle-brush		Carpinus	23
Aplectrum	21	Bear Oak	23	Grass	11	Carion Flower	18
Apocynum	50	Bedstraw	57	Bottle Grass	8	Carrot	47
Apple	34	Beech	23	Bouncing Bet	28	Carum	46
Apple of Peru	54	Fern	1	Box Elder	41	Carva	26
				Brachyelytrum	9		

Cassia	37	Comfrey	52	Datura	54	Erysimum	32
Castalia	29	Commelina	16	Daucus	47	Erythronium	18
Castanea	23	Com-flower	62	Day Lily	17	Eupatorium	59
Castilleja	56	Conium	40	Decodon	44	Euphorbia	40
Catchfly	28	Conopholis	56	Deerberry	49	European Millet	7
Cat Mint	53	Conringia	32	Deer Grass	44	Mountain Ash	34
Catnip	53	Convallaria	18	Dentaria	32	Even'g Primrose	45
Cat-tail	6	Convolvulus	51	Deptford Pink	28	Everlasting	61
Cat-tail Flag	6	Coptis	30	Deschampsia	10	Pea	39
Caulophyllum	30	Coral Root	21	Desmodium	38		
Ceanothus	42	Corallorrhiza	21	Dianthus	28		
Celandine	31	Coreopsis	62	Dicentra	31	F	
Celastrus	41	Corn Chamomile	62	Dicksonia	2	Fagopyrum	26
Celtis	24	Chrysanthem	63	Diervilla	58	Fagus	23
Cenchrus	8	Cockle	28	Digitaria	7	Fall Dandelion	64
Centaurea	64	Gromwell	52	Dipsacus	59	False Flax	31
Cephalanthus	57	Salad	58	Dirca	44	Gromwell	52
Cerastium	27	Speedwell	55	Ditch Stonecrop	33	Hellebore	17
Ceratophyllum	28	Spurrey	27	Dock	25	Indigo	37
Chaff-seed	56	Cornel	47	Dockmackie	58	Loosestrife	45
Chain Fern	1	Cornus	48	Dogbane	50	Miterwort	33
Chamaecyparis	5	Coronilla	33	Dog's Tooth	18	Nettle	24
Chamaedaphne	49	Costmary	61	Violet	40	Pimpernel	55
Chamomile	62	Corydalis	33	Dogwood	55	Solomon's Seal	18
Cheat Grass	11	Corylus	23	Downy False	44	Spikenard	18
Chelidonium	31	Cotton Grass	13	Foxglove	23	Fescue Grass	11
Chelone	55	Thistle	64	Green Alder	55	Festuca	11
Chenopodium	26	Cottonwood	22	Yellow Violet	44	Fever Bush	31
Chestnut	23	Cow Lily	28	Drop-seed	9	Feverfew	63
Oak	23	Parsnip	46	Drosera	33	Feverwort	58
Chickweed	27	Wheat	56	Duckweed	12	Field Mouse-ear	27
Chicory	64	Crab Grass	7	Dulichium	10	Chickweed	27
Chimaphila	47	Cracca	39	Dutchman's	31	Sow Thistle	64
Chinquapin Oak	23	Crack Willow	21	Breches	47	Figwort	55
Chioenes	49	Cranberry-tree	58	Dwarf Cornel	64	Fimbristylis	12
Chokeberry	34	Crane Fly Orchis	21	Dandelion	46	Finger Grass	7
Choke Cherry	37	Cranesbill	39	Ginseng	22	Fir	5
Christmas Fern	1	Crataegus	35	Gray Willow	24	Fireweed	63
Chrysanthemum	62	Creeping Snow-	49	Mistletoe	36	Flax	39
Chrysosplenium	33	berry	29	Raspberry	40	Fleabane	61
Cichorium	64	Spearwort	54	Sumac	40	Fleur-de-lis	19
Cicuta	46	Thyme	65			Floating Foxtail	9
Cimicifuga	39	Crepis	37	E		Heart	56
Cinna	9	Crimson Clover	37	Early Crowfoot	29	Fl'w'r'g Dogwood	48
Cinnamon Fern	2	Crotaria	37	Meadow Rue	29	Fern	2
Rose	37	Crowfoot	29	Saxifrage	33	Flow'r-of-an-hour	42
Cinquefoil	35	Cryptogramma	1	Echinochloa	59	F'rkd Chickweed	27
Circaea	45	Cryptotaenia	46	Echinocystis	52	Fowl Mead. Grass	11
Cirsium	63	Cuckoo Flower	32	Echium	57	Foxtail Grass	9
Cladium	13	Culver's-root	55	Eel Grass	52	Fragaria	35
Clammy Azalea	48	Currant	34	Elaeagnus	44	Fraxinus	50
Locust	38	Cursed Crowfoot	29	Elder	58	Fringed Gentian	50
Claytonia	28	Cuscuta	51	Elecampane	61	Orchis	19
Cleavers	57	Cut-grass	8	Eleocharis	12	Polygala	40
Clematis	30	Cynodon	10	Eleusine	10	Frost Grape	42
Clethra	47	Cynoglossum	52	Elm	24	Frostweed	43
Cliff Brake	1	Cynthia	64	Elymus	11	Fuirena	13
Climbing False		Cyperus	11	Enchanter's	45	Fumaria	31
Buckwheat	25	Cypress	5	Nightshade	56	Fumitory	62
Fern	2	Spurge	40	Epifagus	49		
Fumitory	31	Cypripedium	19	Epigaea	45	Galinsoga	62
Hemp-weed	59	Cystopteris	2	Epilobium	45	Galium	57
Clintonia	18			Epipactis	20	Galeopsis	53
Closed Gentian	50	D		Equisetum	3	Gall-of-the-earth	65
Clover	37	Dactylis	10	Eragrostis	10	Gard. Asparagus	18
Club Moss	3	Daisy Fleabane	61	Erechtites	63	Heliotrope	58
Cocklebur	62	Dalibarda	36	Erigeron	61	Orpine	33
Colic Root	18	Dandelion	64	Eriocaulon	16	Rose	37
Collinsonia	54	Danthonia	10	Eriophorum	13	Sorrel	25
Coltsfoot	63	Darnel	11				
Columbine	30						
Comandra	24						

Marsh Marigold	30	Myriophyllum	45	Pale Corydalis	31	Polygonum	25
Speedwell	55			Dock	31	Polypodium	1
St. John's-wort	43			Laurel		Polypody	1
Mat Grass	11	N		Touch-me-not	42	Polystichum	1
Matrimony Vine	54			Panax	46	Pondweed	6
May Apple	30	Naiad	6	Panic Grass	7	Pontoderia	17
Mayflower	49	Najas	6	Panicum	7	Poplar	22
May-weed	62	Nardus	11	Pansy	44	Populus	22
Meadow Fescue	11	Neckweed	55	Paper Birch	23	Portulaca	28
Foxtail	9	Nemopanthus	41	Pappoose Root	30	Potamogeton	6
Grass	10	Nepeta	53	Parietaria	24	Potentilla	35
Parsnip	46	Nettle	24	Parnassia	33	Poverty Grass	8
Rue	39	New Jersey Tea	42	Parsnip	46	Prairie Willow	22
Meadow-sweet	34	Nicandra	54	Partridge Berry	57	Prenanthes	65
Medeola	18	Night Flowering	54	Paspalum	7	Prickly Ash	39
Medic	31	Campion	28	Pastinaca	46	Gooseberry	34
Medicago	38	Nightshade	54	Pasture Thistle	63	Lettuce	64
Medick	38	Northern Bed-		Patience Dock	25	Primrose-leaved	
Melampyrum	56	straw	57	Pearlwort	27	Violet	43
Melilotus	ii, 38	Fox Grape	42	Pearly Everlas'g	61	Prince's Feather	25
Melissa	53	Norway Spruce	5	Pedicularis	56	Pine	47
Menispermum	30	Nut Rush	13	Pellaea	1	Privet	50
Mentha	54	Nymphaea	28	Pellitory	24	Proserpinaca	45
Menyanthes	50	Nymphoides	50	Peltandra	16	Prunus	37
Mermaid-weed	45	Nyssa	47	Penthorum	33	Prunella	53
Mexican Tea	26			Pentstemon	55	Psedera	42
Microstylis	21			Peppergrass	31	Psilocarya	12
Mikania	59	O		Peppermint	54	Ptelea	39
Mild Water				Petasites	63	Pteris	1
Pepper	25	Oak	23	Phalaris	8	Pterospora	48
Milk Purslane	40	Oakesia	17	Phegopteris	1	Purple Amaranth	26
Milkweed	51	Oat	10	Phleum	9	Azalea	48
Milkwort	40	Grass	10	Phlox	51	Flower'g Rasp.	36
Mimulus	55	Oenothera	45	Phragmites	10	Fringed Orchis	20
Mint	54	Old-witch Grass	7	Phryma	56	Gerardia	56
Mitchella	57	One-flowered	56	Physalis	54	Milkweed	51
Mitella	33	Cancer-root	56	Phytolacca	20	Thorn Apple	54
Miterwort	33	Pyrola	47	Picea	5	Willow	22
Mocker Nut	22	One-seeded Bur	59	Pickernel Weed	17	Purslane	28
Mock Pennyroyl	53	Cucumber	39	Picris	64	Putty Root	21
Mollugo	27	Onion	17	Pigeon Grape	42	Pycnanthemum	54
Monarda	53	Onoclea	2	Grass	8	Pyrola	47
Moneses	47	Onopordum	64	Pig Nut	22	Pyrus	34
Moneywort	49	Onosmodium	52	Pigweed	26		
Monkey Flower	55	Ophioglossum	2	Pilea	24	Q	
Monotropa	47	Orange Grass	43	Pin Oak	23	Quaking Grass	10
Moonseed	30	Hawkweed	65	Pine	5	Quercus	23
Moonwort	2	Orchard Grass	10	Drops	48	Quillwort	4
Morning Glory	51	Orchis	19	Pinesap	47		
Morus	24	Origanum	54	Pink	28		
Mossy Stonecrop	33	Ornithogalum	18	Pinus	5		
Motherwort	53	Orobancha	56	Pinweed	43	R	
Moth Mullein	55	Orontium	16	Pipewort	16	Rabbit-foot	37
Mountain Fly		Oryzopsis	8	Pipsissewa	47	Radicula	32
Honeysuckle	58	Osmorhiza	46	Pitch Pine	5	Radish	32
Holly	41	Osmunda	2	Plantago	57	Ragged Fringed	
Laurel	48	Ostrich Fern	2	Plantain	57	Orchis	20
Maple	41	Ostrya	23	Plantain-leaved		Robin	28
Mint	54	Oswego Tea	53	Everlasting	61	Ragweed	61
Rice	8	Oxalis	39	Platanus	34	Kam's Head	
Mouse-ear Chick-		Ox-eye	62	Plum	37	Lady's Slip'r	19
weed	27	Daisy	62	Poa	10	Ramsted	55
Moxie Plum	49	Ox-tongue	64	Podophyllum	30	Ranunculus	ii, 29
Mud Plantain	17	Oxybaphus	27	Podostemum	33	Raphanus	32
Mugwort	63			Pogonia	20	Rattle-box	37
Mulberry	24			Poison Hemlock	46	Rattlesnake Fern	3
Mullein	55			Ivy	51	Grass	11
Muscari	18	P		Poke Milkweed	40	Plantain	20
Musk Mallow	42	Painted Cup	56	Pokeweed	26	Rattlesnake-root	65
Mustard	32	Trillium	18	Polygala	40	Rattlesn'e-weed	65
Myosotis	52			Polygonatum	18		
Myrica	22			Polygonella	26		

Red Ash	50	Sand Bar Willow	21	Small Solomon's	52	Stickseed	52
Baneberry	30	Cherry	37	Seal	18	Stiff Water Crow-	
Campion	28	Spurrey	27	Smaller Bladder-		foot	29
Cedar	5	Sandbur	8	wort	56	St. John's-wort	43
Clover	37	Sandwort	27	Yellow Lady's		Stoncrop	33
Currant	37	Sanguinaria	31	Slipper	19	Stramonium	54
Maple	41	Sanguisorba	36	Small-flowered		Strawberry	35
Mulberry	24	Sanicle	46	Crowfoot	29	Blite	26
Oak	23	Sanicula	46	Smartweed	25	Tomato	54
Pine	5	Saponaria	28	Smilacina	18	Streptopus	18
Spruce	5	Sarracenia	33	Smilax	18	Striped Maple	41
Top	9	Sassafras	31	Smooth Alder	23	Struthiopteris	2
Red-ber'd Elder	58	Satureja	53	False Foxg'l'e	55	Sugarberry	24
Red-ozier Dog-		Savory	53	Gooseberry	34	Sugar Maple	41
wood	47	Saxifraga	33	Sumac	40	Sumac	40
Red-root	42	Saxifrage	33	Winterberry	41	Sundew	33
Red-seeded Dan-		Scarlet Oak	23	Snowberry	58	Sundrops	45
delion	64	Painted Cup	56	Solanum	54	Sunflower	62
Reed	10	Scheuchzeria	7	Solidago	60	Swamp But'rcup	29
Bent Grass	9	Schwalbea	55	Solomon's Seal	18	Dock	25
Canary Grass	8	Scirpus	12	Sonchus	64	Loosestrife	44
Meadow Grass	11	Sciranthus	27	Sorbaria	34	Milkweed	51
Rhamnus	42	Scleria	13	Sow Thistle	6	Saxifraga	33
Rhexia	44	Scorpion-grass	52	Sparganium	6	Thistle	63
Rhododendron	48	Scotch Pine	5	Spartina	10	White Oak	23
Rhus	40	Scouring Rush	3	Spearmint	54	Sweet Birch	23
Ribbon Grass	8	Scrophularia	55	Speckled Alder	23	Sweetbrier	37
Ribes	34	Scutellaria	53	Specularia	59	Cicely	46
Rib Grass	57	Sedge	13	Speedwell	55	Clover	38
Rice Cut-grass	8	Sedum	33	Sphenopholis	9	Coltsfoot	63
Richweed	24	Seedbox	45	Spergula	27	Fern	22
River-b'nk Grape	42	Selaginella	3	Spergularia	27	Flag	16
River Bulrush	12	Self-heal	53	Spice Bush	31	Gale	22
Weed	33	Sempervivum	33	Spiderwort	16	Golden-rod	60
Robinia	38	Senecio	63	Spiked Loose-		Pepperbush	47
Robin's Plantain	61	Senna	37	strife	44	Vernal Grass	8
Rock Brake	1	Sensitive Fern	2	Spikenard	45	Viburnum	58
Cress	32	Sericocarpus	61	Spike Rush	12	William Catchfly	
Rockrose	43	Setaria	8	Spiraea	34	Woodruff	57
Roman Worm-		Shad Bush	34	Spiranthes	20	Switch Grass	7
wood	62	Shagbark Hick'y	22	Spirodela	16	Sycamore	34
Rosa	37	Sheep Laurel	48	Spleenwort	1	Symphoricarpus	58
Rose	37	Sorrel	25	Sporobolus	9	Symphytum	52
Mallow	42	Sheep's Fescue	11	Spotted Cowbane	46	Symplocarpus	16
Rough Bedstr'w	57	Sheph'rd's Purse	31	Touch-me-not	42		
Rough-stalked		Shield Fern	1	Wintergreen	47		
Mead'w Gr's	10	Shin Leaf	47	Spreading Dog-			
Round-leaved		Shining Willow	21	bane	50		
Cornel	47	Showy Lady's		Spring Beauty	28		
Sundew	33	Slipper	19	Cress	32		
Violet	44	Orchis	19	Vetch	38		
Rubus	36	Shrubby Cinque-		Spring-leaved			
Rudbeckia	62	foil	35	Sow Thistle	64		
Rue Anemone	29	Sickle-pod	32	Spruce	5		
Rumex	25	Sicyos	59	Spurge	40		
Rush	17	Silene	28	Spurred Gentian	50		
Grass	9	Silky Cornel	47	Squaw-root	56		
Russian Thistle	26	Willow	22	Squirrel Corn	31		
Rutabaga	32	Silver Maple	41	Stachys	53		
Rye Grass	11	Silvery Cinquef'l	35	Staff Tree	41		
Rynchospora	13	Sisymbrium ii,	32	Staghorn Sumac	40		
		Sisyrinchium	19	Staphylea	41		
		Sium	46	Star Flower	50		
		Skullcap	53	Grass	18		
		Skunk Cabbage	16	Thistle	64		
		Currant	34	Star of Bethle'm	18		
Sagina	27	Sleepy Catchfly	28	Starry Campion	28		
Sagittaria	7	Slender Gerardia	56	Steironema	49		
Salix	21	Slippery Elm	24	Stellaria	27		
Salsify	64	Slopp'g Grass	10	Stemless Lady's			
Salsola	26	Small Cranberry	49	Slipper	19		
Saltwort	26	Bugloss	52	Stenophyllus	12		
Sambucus	58						

S

T

Thoroughwort	59	Utricularia	56	Water Purslane	45	Wild Senna	3
Three-seeded Mercury	40	Uvularia	17	Shield	29	Sensitive Plant	37
Three-toothed Cinquefoil	35	V		Smartweed	25	Teasel	59
Thyme-leaved Sandwort	27	Vaccinium	49	Speedwell	55	Yellow Lily	17
Speedwell	55	Valerian	58	Starwort	40	Willow	21
Thymus	54	Valeriana	58	Willow	44	Willow-herb	45
Tiarella	33	Valerianella	58	Water-weed	7	Winter Cress	32
Tickseed	62	Vallisneria	7	Waxwork	41	Wintergreen	47
Tick 1refoil	38	Vanilla Grass	8	Weeping Willow	21	Witch Grass	11
Tilia	42	Velvet Leaf	42	White Alder	47	Hazel	34
Timothy	9	Grass	9	Ash	50	Wood Anemone	29
Tinker's Weed	58	Venus's Looking-glass	59	Baneberry	30	Mint	53
Tipularia	21	Veratrum	17	Bent Grass	9	Nettle	24
Toothache tree	39	Verbascum	55	Birch	23	Reed Grass	9
Toothwort	32	Verbena	52	Campion	28	Rush	17
Tradescantia	16	Vernonia	59	Cedar	4	Sorrel	2
Tragopogon	64	Veronica	55	Clover	37	Woodsia	39
Treacle Mustard	32	Vervain	52	Fringed Orchis	20	Woodwardia	1
Tree of Heaven	40	Vetch	38	Grass	8	Wool Grass	12
Trichostema	52	Vetchling	39	Lettuce	65	Worm-seed	
Tridens	10	Viburnum	58	Melilot	65	Mustard	32
Trientalis	50	Vicia	38	Mulberry	24	Wormwood	63
Trifolium	37	Viola	43	Mustard	32	X	
Trillium	18	Violet	43	Oak	23	Xanthium	62
Triosteum	58	Wood Sorrel	39	Pine	5	Xyris	16
Triple-awn Grass	8	Viper's Buglose	52	Poplar	22	Y	
Trisetum	9	Virginia Creeper	42	Snakeroot	59	Yarrow	62
True Forget-me-not	52	Snakeroot	24	Vervain	52	Yellow Adder's Tongue	—
Water Cress	32	Virgin's Bower	30	Water Crowfoot	29	Bedstraw	57
Trumpet Honey-suckle	58	Vitis	42	Willow	21	Birch	23
Tsuga	5	W		White-topped Aster	61	Clover	37
Tufted Loosestrife	49	Wake Robin	18	Wild Balsam-apple	59	Cress	32
Tulip Tree	30	Waldsteinia	35	Bergamot	53	Daisy	62
Tumble Weed	26	Walking Leaf	1	Black Cherry	37	Dock	25
Tupelo	47	Wall Rue	1	Black Currant	34	Fringed Orchis	20
Turk's-cap Lily	17	Walnut	22	Chess Grass	11	Melilotus	38
Turtlehead	55	Water Arum	16	Columbine	30	Pond Lily	28
Tussilago	63	Avens	36	Cranesbill	39	Water Crowfoot	29
Twayblade	21	Beech	23	Garlic	17	Yellow-barked Oak	23
Twig Rush	13	Cress	32	Ginger	24	Yellow-eyed Grass	16
Twin-flower	58	Hemlock	46	Indigo	37	Yew	5
Twisted Stalk	18	Horehound	54	Leek	17	Z	
Typha	6	Waterleaf	51	Lettuce	65	Zanthoxylum	39
U		Water Lily	29	Liquorice	57	Zizania	8
Ulmus	24	Lobelia	59	Oat Grass	10	Zizia	46
Umbrella Grass	13	Marigold	62	Orange-red Lily	17		
Tree	30	Milfoil	45	Pansy	44		
Upland Boneset	59	Parsnip	46	Peppergrass	31		
Urtica	24	Pennywort	46	Pink	28		
		Plantain	7, 29	Plum	37		
				Radish	32		
				Red Cherry	37		
				Red Raspberry	36		
				Sarsaparilla	45		

New York Botanical Garden Library

QK 125 .S815

Stone, George Edward/A list of plants gro

gen



3 5185 00126 6319

